

**Full title:**

p62/SQSTM1 interacts with vimentin to enhance breast cancer metastasis

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**Key words:**

Breast cancer; metastasis; p62; vimentin; protein interaction

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**Abstract**

The signalling adaptor p62 is frequently overexpressed in numerous cancer types. Here, we found that p62 expression was elevated in metastatic breast cancer and its overexpression correlated with reduced metastasis-free and relapse-free survival times. Analysis of p62 expression in breast cancer cell lines demonstrated that high p62 expression was associated with the invasive phenotypes of breast cancer. Indeed, silencing p62 expression attenuated the invasive phenotypes of highly metastatic cells, whereas overexpressing p62 promoted the invasion of non-metastatic cells in *in vitro* microfluidic model. Moreover, MDA-MB-231 cells with p62 depletion which were grown in a three-dimensional culture system exhibited a loss of invasive protrusions. Consistently, genetic ablation of p62 suppressed breast cancer metastasis in both zebrafish embryo and immunodeficient mouse models, as well as decreased tumorigenicity *in vivo*. To explore the molecular mechanism by which p62 promotes breast cancer invasion, we performed a co-immunoprecipitation (co-IP)-MS analysis and revealed that p62 interacted with vimentin, which mediated the function of p62 in promoting breast cancer invasion. Vimentin protein expression was downregulated upon p62 suppression and upregulated with p62 overexpression in breast cancer cells. Linear regression analysis of clinical breast cancer specimens showed a positive correlation between p62 and vimentin protein expression. Together, our findings provide strong evidence that p62 functions as a tumour metastasis promoter by binding vimentin and promoting its expression. This finding might help to develop novel molecular therapeutic strategies for breast cancer metastasis treatment.

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3 **Summary:** p62 functions as a tumor metastasis promoter through its interaction with vimentin. This  
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5 finding might help to develop novel molecular therapeutic strategies for breast cancer metastasis  
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7 treatment.  
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## 10 11 12 **Introduction**

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14 Cancer metastasis is a complex multi-step cell biological process termed the  
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16 invasion-metastasis cascade, by which primary tumour cells acquire the invasive ability  
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18 and then spread to distant organs [1-3]. Metastases are responsible for more than 90% of  
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20 cancer-related deaths in various solid malignancies, including breast cancer [4, 5].  
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22 Despite the early diagnostic methods, surgical resection and adjuvant therapy have  
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24 improved, metastatic disease is largely incurable [6]. Recent studies have shown that the  
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26 primary cause for cancer cells to drive the invasion-metastasis process is the acquisition  
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28 of the genetic or epigenetic alterations [7, 8]. Thus, the exploration of key molecules and  
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30 mechanisms underlying breast cancer metastasis regulation is urgently needed.  
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36 The adaptor protein p62 (also known as SQSTM1) is initially identified as a  
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38 cytosolic 62kDa protein which can bind to the isolated src homology 2 (SH2) domain of  
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40 p56<sup>lck</sup> [9]. This multidomain protein interacts selectively with different signalling  
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42 intermediaries, such as Raptor [10], Nrf2-binding site on Keap1 [11], ubiquitin and LC3  
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44 [12, 13], to regulate metabolic reprogramming, antioxidant response and selective  
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46 autophagy, respectively. Abnormal p62 overexpression has been documented in various  
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48 neoplasms [14-19], especially in breast cancer [20-22]. For example, the scaffold p62  
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50 protein cooperates with the Wnt/PCP protein VANGL2 and recruits JNK to VANGL2,  
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52 which is required for tumour growth in breast cancer [23]. In addition, high p62  
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54 expression is associated with breast tumours exhibiting the clinicopathological features of  
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3 aggressive disease, as well as overexpression of EGF receptor (EGFR), HER2, HER3 and  
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5 HER4 [21]. In triple-negative breast cancers, patients with p62 accumulation exhibit a  
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7 higher risk of positive lymph node and lymphovascular invasion [22]. These findings  
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9 highlight the potential of p62 as a therapeutic target during cancer progression. However,  
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11 the detailed mechanism by which p62-mediates cancer cell invasion and metastasis  
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13 remains largely unknown.  
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17 Studies of epithelial malignancies indicate that the acquisition of invasion and  
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19 metastasis potential by the incipient cancer cell may depend on the transition of a  
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21 mesenchymal phenotype [24]. Vimentin, a Type III intermediate filament, serves as a  
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23 classical mesenchymal phenotype biomarker [25, 26]. Furthermore, vimentin protein  
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25 overexpression positively correlates with cell motility, induction of EMT, metastatic  
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27 disease and poor prognosis [27-31]. *Vimentin*-deficient (-/-) mice reveal weakened wound  
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29 healing ability in all stages of growth as a result of the seriously impaired fibroblasts in  
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31 their capacity to migrate [32, 33]. In this study, we found that p62 binds to vimentin and  
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33 regulates vimentin protein level, which in turn contributes to cancer cell invasion and  
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35 metastasis. Thus, this p62-vimentin interaction may be a promising target and provide  
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37 new opportunities for therapeutic intervention.  
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## 46 **Materials and methods**

### 47 *Clinical samples, cell culture and reagents*

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49 All breast cancer specimens and adjacent normal tissues were obtained from clinical  
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51 diagnosed patients with prior patient consent and the approval of the Institutional Clinical  
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53 Ethics Review Board in the 2<sup>st</sup> Affiliated Hospital of Dalian Medical University. Samples  
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3 were kept in liquid nitrogen for protein extraction.  
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6 The human breast cancer cell lines (MDA-MB-231, SKBR-3, BT549 and MCF7),  
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8 the immortalized human breast epithelial cell MCF-10A and human embryonic kidney  
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10 HEK293T cell line were obtained from the American Type Culture Collection (ATCC).  
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12 The SUM149 cell line was kindly provided by Prof. Zhi-Min Shao (Department of  
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14 Medical Oncology, Cancer Hospital of Fudan University, Shanghai Medical College,  
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16 Shanghai, China). All the cell lines were tested and authenticated by the standard short  
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18 tandem repeat DNA typing methodology before used in this study [46]. Each cell line  
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20 was cultured in its standard medium as recommended by ATCC. SUM149 cells were  
21  
22 cultured in F-12 Hams (Gibco) supplemented with 5% FBS (Hyclone), 5 µg/ml insulin  
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24 (Sigma-Aldrich), and 1 µg/ml hydrocortisone (Sigma-Aldrich). The cells were last tested  
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26 in July 07<sup>th</sup>, 2015.  
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### 31 *Plasmid construction*

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34 Full-length of p62 fragment was cloned from human genome cDNA and ligated into  
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36 pLVX-DsRed-Monomer-N1 vector (Clontech). The primers were as followed: p62: 5'  
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38 Xho I, 5'-CCGCTCGAGCGGGCCACCATGGCGTCGCTCACCGTGAAGGCC; 3'  
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40 EcoR I, 5'-CCGGAATTCGTCACAACGGCGGGGGATGCTTTGA. Flag-p62 was a  
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42 gift from Prof. Song-Shu Meng (Department of Cancer Biology, Dalian Medical  
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44 University, Dalian, China). The short hairpin RNA (shRNA) targeting p62 (1#, 2#) and  
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46 the nontarget shRNA (SHC002) were kindly provided by Dr. Zi-Jie Long (Department of  
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48 Hematology, the Third Affiliated Hospital, Sun Yat-sen University, Guangzhou, China)  
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50 and packaged for lentivirus particles. The full-length vimentin plasmid was cloned from  
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52 human genome cDNA and ligated into pcDNA6 vector in a frame with Myc and His tag  
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3 (Invitrogen). The primers were as followed: vimentin: 5' Kpn I,  
4 5'-GGGGTACCCCGCCACCATGTCCACCAGGTCCGTGTCC; 3' EcoR I,  
5 5'-CCGGAATTCGGTTCAAGGTCATCGTGATGCTGAGAAG. The constructs  
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8 pLVX-GST-p62 and pLVX-GST-vimentin were generated by PCR and confirmed by  
9  
10 sequencing. Flag-Ub was a gift from Dr. Muhammad Kamran (Department of Cancer  
11  
12 Biology, Dalian Medical University, Dalian, China). The shRNA constructs targeting  
13  
14 Vimentin and referring to the sequence is: Forward,  
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16 CCGGCTCTGGTTGATACCCACTCAACTCGAGTTGAGTGGGTATCAACCAGAGT  
17  
18 TTTTG; Reverse,  
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20 AATTCAAAAACCTCTGGTTGATACCCACTCAACTCGAGTTGAGTGGGTATCAAC  
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22 CAGAG. The above fragment was cloned into pLKO-Tet-On-shNC vector.  
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### 29 *RNAi and Transfection*

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32 Transient RNAi transfection was carried out as previously described [47]. Two  
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34 different target siRNA sequences of p62 were obtained from GenePharma Co. Ltd (1#,  
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36 5'-GUGACGAGGAAUUGACAAUTT; 2#, 5'-GGAGUCGGAUAACUGUUCATT).  
37  
38 The negative control siRNA was 5'-UUCUCCGAACGUGUCACGUTT. RNAi was  
39  
40 transfected into the culture cells using Lipofectamine 2000 Transfection Reagent  
41  
42 (Invitrogen) according to the manufacturer's instructions.  
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### 46 *Lentivirus preparation*

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48 HEK293T cells were used for packaging lentivirus with the 2nd generation  
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50 packaging system plasmid psPAX2 (Addgene) and pMD2.G (Addgene). Lentiviruses  
51  
52 were concentrated by ultracentrifugation, and viral titer determined by serial dilutions.  
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55 For infection with the lentivirus, infected cells were selected with Puromycin (2 µg/ml)  
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(Sigma-Aldrich).

#### *Microfluidic chips*

This microfluidic device consisting of one central chamber and two side channels was adopted in the present study and was modified for certain use (Supplementary Figure 1). Inlet and outlet ports of the PDMS (poly-dimethyl-siloxane; Silgard 184, Dow Chemical) devices were bored using disposable biopsy punches and the PDMS layer was bonded to a cover glass to create microfluidic channels 80µm deep with oxygen plasma treatment. These devices were subsequently sterilized by autoclave and dried in oven. Then, Matrigel (BD Biosciences) was mixed with same volume cell culture medium and was injected within the central channel using a 200 µl pipette. The chips were placed in the 10 cm petri dishes which contain 3 ml sterile water and were ready for use after 15 min standing.

#### *Transwell invasion assay*

Cells were placed into 10% matrigel (BD Biosciences) coated membrane in upper chamber (24-well insert, 8 µm, Corning Costar). Medium with 10% FBS was used as an attractant in the lower chamber. After being incubated for 36 hours, cells invaded through the membrane were fixed with 75% ethanol and stained with DAPI (1 µg/ml). The stained cell images were captured by microscope (Olympus), and five random fields at 10× magnification were counted. Results were shown as average from at least three independent experiments. Error bars represented the SD.

#### *Three-dimensional culture*

Three-dimensional culture was carried out as previously described [48]. Culture slides (BD BioCoat) were added with 80 µl Matrigel (BD Biosciences) per well and



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3 incubated at 37°C for 1 hour. Next, cells ( $2 \times 10^3$ ) mixed with 2% Matrigel were added to  
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5 each well and refed each 3 days. Finally, we observed the cell morphology under a  
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7 fluorescence microscope (Olympus).  
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#### 10 *Zebrafish embryo xenograft assay*

#### 11 *Zebrafish maintenance*

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15 Zebrafish adult specimens were maintained following the standard guidelines  
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17 depicted in Nüsslein - Volhard and Dahm (2002). Zebrafish were kept in a  
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19 self-recirculating aquarium at an average temperature of 28°C with a 14-hours light  
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21 10-hour dark cycle. Adult specimens were fed twice a day on a diet of Hikari micropellets  
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23 (Kyorin) and brine shrimp. Zebrafish embryos (1 dpf – 7 dpf) were kept in a solution  
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25 composed of system water (chlorine deprived tap and distilled water mixture) with the  
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27 addition of 0.0003% (v/v) methylene blue (antifungal) at a constant temperature of 28°C.  
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#### 32 *CM-Dil labeling*

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35 Cells lines were pre-seeded to obtain a culture with 80% level of confluency on the  
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37 day of the CM-DiI (Invitrogen) cell labelling. CM-DiI dye was diluted in DMEM without  
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39 solutes according to the concentrations defined during the DiI-labelling optimisation. Cell  
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41 lines were individually trypsinised and centrifuged to obtain a pellet. Cell pellets were  
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43 resuspended in 5µl/mL CM-DiI dilutions. Cells were left to incubate in the dye at 37°C at  
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45 10% CO<sub>2</sub> for 10 min. Following treatment, cells were rinsed once with PBS and  
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47 centrifuged twice to remove all excess media prior to injection. The final pellet was then  
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49 used for the zebrafish microinjection procedure.  
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#### 53 *Microinjection of human tumour cells*

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56 Zebrafish embryos developed in the chorion and have to be dechorionated at 24 hpf  
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3 prior to injection. Human tumour cell lines (MCF-7 NSC and MCF-7 p62 siRNA) were  
4 pre-labelled with CM-DiI and centrifuged to obtain a dry pellet. The embryos were  
5 anaesthetized in a solution containing 0.003% tricane (Sigma) 10 min prior to injection.  
6  
7 Injections were performed on an injection mould composed of 3% agarose in a solution  
8 of pre-warmed PBS (+Mg +Ca) 0.003% tricane, using a 12 mm gage borosilicate pipette  
9 fixed on a Narishige microinjector. Embryos were injected in the yolk sac region in  
10 proximity of the embryos sub-intestinal vessels with approximately 150 breast cancer  
11 cells. Injections were completed within 1 hour following which embryos were placed at  
12 28°C in a solution of system water with methylene blue for the duration of the  
13 experiment.  
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27 Embryos were imaged individually at 3dpi under a wide-field fluorescent  
28 microscope (Olympus CKX41). 0.05% tricaine was added to their water to prevent their  
29 movement during the live imaging procedure. Pictures were captured with Q Capture-Pro  
30 (QImaging). Any alteration of the original picture was performed with the aid of ImageJ.  
31 The corrected total cell fluorescence (CTCF) was measured using the formula: CTCF=  
32 Integrated Density – (Area of selected cell × Mean fluorescence of background readings)  
33 for each imaged zebrafish.  
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#### 44 *Analysis of metastasis*

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46 Female BALB/C-nu mice (4-6 weeks old) were tail intravenous injected with  $1 \times 10^6$   
47 cells per mouse. After 8 weeks, lungs were removed and examined macroscopically or  
48 detected in paraffin-embedded sections stained with H&E.  
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#### 51 *Analysis of tumour growth*

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55 Female BALB/C-nu mice (4-6 weeks old) were subcutaneously inoculated with  
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3 equal amounts ( $1 \times 10^6/100 \mu\text{l}$  in PBS containing 50% Matrigel) of single cells. Tumour  
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5 formation was monitored for 8 weeks. The tumour volumes and weights were determined  
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7 by the method described previously [46]. All animal studies were approved by the  
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9 Institute Animal Care and Use Committee of Dalian Medical University, and carried out  
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11 in accordance with established institutional guidelines and approved protocols.  
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#### 14 *RNA extraction, reverse transcription-PCR and real-time quantitative PCR*

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17 Total RNA was extracted by using TRIzol reagent (Life technologies). cDNA was  
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19 generated by using EasyScript One-Step gDNA Removal and cDNA Synthesis SuperMix  
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21 Kit (TransGen Biotech) according to the manufacturer's instructions. Real-time  
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23 quantitative PCR was performed by using the specific SYBR Select Master Mix (Life  
24  
25 technologies) in a MX3000p cycler (Stratagene). Changes of mRNA levels were  
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27 determined by the  $2^{-\Delta\Delta\text{CT}}$  method using Actin for internal crossing normalization.  
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29 Detailed primer sequences for qPCR were listed in Supplementary Table 1.  
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#### 34 *Western blot analysis*

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37 Samples were lysed on ice in RIPA buffer (50 mM Tris [pH 8.0], 150 mM sodium  
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39 chloride, 0.5% sodium deoxycholate, 0.1% SDS, and 1% NP-40) supplemented with  
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41 protease inhibitors (1 mM  $\text{Na}_3\text{VO}_4$ , 1  $\mu\text{g}/\text{mL}$  leupeptin, and 1 mM PMSF). The protein  
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43 concentration was determined by the Coomassie brilliant blue dye method. In all, equal  
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45 amounts of protein per lane were run in 6% to 15% SDS-PAGE gels and subsequently  
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47 transferred to a nitrocellulose membrane (Millipore) via submerged transfer. After  
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49 blocking the membrane at room temperature for 1 hour, the membrane was incubated  
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51 overnight at  $4^\circ\text{C}$  with various primary antibodies. After incubation with  
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53 peroxidase-conjugated secondary antibodies (Thermo Scientific) for 1 hour at room  
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3 temperature, the signals were visualized using an enhanced chemiluminescence Western  
4 blot detection kit (K-12045-D50; Apgbio, Beijing, China) according to the  
5 manufacturer's instructions. The blots were developed using the Bio-Rad Molecular  
6 Imager instrument (Bio-Rad, USA). The information of antibodies were listed as follows:  
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8 Actin (Proteintech, #60008-1), GAPDH (KANGCHEN, KC-5G4), p62 (Santa Cruz,  
9 sc-28359), p62 (D5E2) (CST, 8025), Vimentin (ALBIOCHEM, #IF01), FLAG-TAG  
10 (Protein Tech, 66008-1-Ig), HIS-TAG (Protein Tech, 66005-1-Ig), HIS-TAG (BBI,  
11 D110002-0200), Ubiquitin (UBB) (Protein Tech, 60310-1-Ig), LC3B (Sigma-Aldrich,  
12 L7543), GOAT ANTI-MOUSE (ABB-Kinase, a25012-1), GOAT ANTI-RABBIT  
13 (Protein Tech, sa00001-2), Goat anti-Mouse IgG (HRP conjugated) (Thermo-Pierce,  
14 31430), Goat anti-Rabbit IgG (HRP conjugated) (Thermo-Pierce, 31460).

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*Co-immunoprecipitation analysis, In-Gel Trypsin Digestion, Mass Spectrometry,*  
*Immunofluorescence staining and Statistical analysis*

See Supplementary Materials and Methods.

## Results

*p62 expression is elevated in metastatic breast cancer and its overexpression correlates with poor prognosis.*

In an effort to explore the relationship between p62 expression and breast cancer metastatic capacity, we first collected 5 pairs of clinical metastatic breast cancer and adjacent normal tissues, and conducted Western blot analysis of p62 expression levels. Compared with adjacent normal tissues, p62 protein levels were up-regulated at varying degrees in all metastatic breast cancer tissues (Figure 1A). Consistently, analysis of gene

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4 expression value from TCGA showed that p62 mRNA expression levels in normal tissues  
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6 (n=110) were significantly lower than that in both primary tumour (n=1065; -0.4355  
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8 versus -0.1485) and metastatic tumour tissues (n=7; -0.4355 versus -0.1423) (Figure 1B).  
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10 Further, the Kaplan-Meier survival analysis of 87 breast carcinoma specimens revealed a  
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12 correlation between the higher p62 expression and reduced metastasis-free survival times  
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14 ( $P=0.011$ , GSE6532 from the GEO database) (Figure 1C). Moreover, 104 breast cancer  
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16 samples from GEO database (GSE42568) by univariate analysis showed that high p62  
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18 expression was associated with decreased relapse-free survival times ( $P < 0.0001$ ) (Figure  
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20 1D). These data suggest that p62 is accumulated in metastatic breast cancer and its  
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22 overexpression correlates with poor clinical outcome of breast cancer.  
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30 *p62 promotes invasive phenotypes of breast cancer cells in vitro.*

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32 To investigate whether the expression level of p62 regulated invasive phenotypes of  
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34 breast cancer cells, we first examined the expression of p62 in five breast cancer cell lines  
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36 (SKBR-3, MDA-MB-231, BT-549, SUM149 and MCF-7), and a noncancerous breast  
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38 epithelial cell line (MCF-10A). Here we found that both the mRNA and protein levels of  
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40 p62 in metastatic group (SKBR-3, MDA-MB-231, BT-549, SUM149) were much higher  
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42 than that in non-metastatic group (MCF-7, MCF-10A), indicating that the expression  
43  
44 level of p62 positively correlated with the invasive phenotypes of breast cancer (Figure  
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46 2A and 2B). Then we used shRNA to mediate p62 depletion in metastatic MDA-MB-231  
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48 cells and lentivirus to facilitate ectopic overexpression of p62 in non-metastatic  
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50 MCF-10A cells. The efficiencies of p62 knockdown and overexpression were assessed by  
51  
52 western blotting. The efficiencies of p62 knockdown and overexpression were assessed by  
53  
54 western blotting. As shown in Figure 2C, p62 was effectively suppressed by two different  
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3 p62 shRNA species in MDA-MB-231 cells, and significantly increased by  
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6 lentivirus-infection in MCF-10A cells.  
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Herein, we built up a microfluidic model to observe local invasion of cancer cells in real time (Supplementary Figure 1) to assess the contribution of p62 in promoting breast cancer invasive ability. Silencing p62 expression dramatically reduced the invasive capacity of MDA-MB-231 cells as indicated by a decrease in both the area and distance of invasion (Figure 2D). Consistently, depletion of p62 impaired the ability of metastatic MDA-MB-231 cells to invade through matrigel pre-coated transwells (Supplementary Figure 2A). In contrast, overexpressing p62 in non-metastatic MCF-10A cells resulted in the acquisition of invasive ability as indicated by both the microfluidic and Transwell invasion assays (Figure 2E, Supplementary Figure 2B). Moreover, we examined the effect of p62 suppression on the ability of MDA-MB-231 cells to form colonies in three-dimensional matrigel culture. After ten days in culture, control cells formed multiple protrusions invading into the surrounding matrix while MDA-MB-231 cells with p62 depletion formed smooth edges around cell spheres (Figure 2F-a). These results were quantified by calculation of the perimeter, which showed a significant difference between control and p62 knockdown cells (Figure 2F-b). Together, these observations indicate that p62 enhances breast cancer cells invasion.

*Inhibition of p62 attenuates breast cancer metastasis and leads to decreased tumorigenicity in vivo.*

We next evaluated the *in vivo* effects of p62 depletion on breast cancer metastasis. In zebrafish embryo xenograft assay, we engrafted MCF-7 siNC and MCF-7 sip62 cells,

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3 stably expressing red fluorescent proteins, in a zebrafish embryo host. At 3 days  
4 post-implantation (dpi), silencing p62 expression in MCF-7 cells exhibited an obviously  
5 reduced invasive behavior when compared to control cells (Figure 3A). In addition,  
6 zebrafish embryo engrafted with p62 siRNA MCF-7 cells had a lower metastases  
7 incidence (20/90, 22.2%) compared to control cells (49/111, 44.1%) (Figure 3B).  
8 Quantification of the fluorescence intensity of invasive cells showed a significant  
9 decrease elicited by p62 knockdown (Figure 3C). In mice xenograft models, control  
10 shRNA MDA-MB-231 and p62 shRNA MDA-MB-231 cells were injected into the lateral  
11 tail vein of 4~6 weeks old BALB/C (nu/nu) female nude mice. Eight weeks after  
12 injection, mice injected with MDA-MB-231-shp62 cells had a markedly decreased  
13 metastatic burden as measured by macrography and H&E staining (Figure 4A-a&b).  
14 Consistently, the area and number of metastatic nodules in the lung of mice injected with  
15 MDA-MB-231-shp62 cells were significantly reduced as compared with that injected  
16 with MDA-MB-231-shNC cells (Figure 4A-c). These results indicate that silencing p62  
17 expression attenuates the metastatic ability of breast cancer.  
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39 To determine the effect of p62 knockdown on tumour growth, equal number of  
40 control and p62 knockdown MDA-MB-231 cells ( $1 \times 10^6$  cells) were subcutaneously  
41 injected into 4~6 weeks old BALB/C (nu/nu) female nude mice (5 mice in each group).  
42 Tumour xenografts were then measured every week and mice sacrificed after 8 weeks. As  
43 shown in Figure 4B, comparing with mice inoculated with MDA-MB-231-shNC cells,  
44 which formed large tumours within 56 days, the mice inoculated with  
45 MDA-MB-231-shp62-1 and shp62-2 cells showed a significant reduction in the tumour  
46 growth as indicated by the decreased tumour volumes and tumour weights. These results  
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3 demonstrate that p62 suppression contributes to decreased tumorigenicity in breast  
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10 *Identification of vimentin as a novel p62 binding partner and p62 suppression*  
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12 *downregulates vimentin protein expression.*  
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15 To further explore the mechanism for p62-mediated breast cancer invasion and  
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17 metastasis, we sought to identify novel p62 binding proteins. Taking advantage of the  
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19 proteomics-based approach, we analyzed endogenous p62 coimmunoprecipitated (co-IP)  
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21 proteins by mass spectrometry to identify putative p62 protein binding partners (Figure  
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23 5A, Supplementary Table 2 and 3). Here, we focused our investigations on vimentin,  
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25 which has been revealed to be a major intermediate filament in mediating cell movement  
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27 [27, 34, 35]. To this end, we first examined whether endogenous p62 bound to vimentin  
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29 by co-immunoprecipitation in MDA-MB-231 cells. In these cell extracts, we detected  
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31 vimentin after immunoprecipitation with a p62 antibody, but not with the control IgG,  
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33 indicating that p62 interacted with vimentin (Figure 5B). In addition, the p62-vimentin  
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35 interaction was further confirmed by glutathione S-transferase pull-down assay, by which  
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37 GST-tagged p62 co-precipitated with His-tagged vimentin, as well as GST-tagged  
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39 vimentin cooperated with Flag-tagged p62 (Figure 5C and 5D). Furthermore,  
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41 Immunofluorescence studies using p62 and vimentin specific antibodies showed that both  
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43 proteins co-localized in the cytoplasm in MDA-MB-231 cells (Supplementary Figure 3).  
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45 Together, these data suggest that p62 binds to vimentin in breast cancer cells.  
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53 Next, we examined the effects of silencing or overexpressing p62 on both the  
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55 mRNA and protein levels of endogenous vimentin. As shown in Figure 5E-a and  
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Supplementary Figure 4A-a, shRNA or RNAi mediated depletion of p62 downregulated the protein expression levels of vimentin in both MDA-MB-231 and SK-BR-3 cells. In contrast, lentivirus-mediated overexpression of p62 upregulated vimentin protein levels in both MCF-10A and MCF-7 cells (Figure 5F-a and Supplementary Figure 4B-a). Interestingly, vimentin mRNA levels exhibited no significant differences whether in p62 knockdown MDA-MB-231 and SK-BR-3 cells or in p62 overexpression MCF-10A and MCF-7 cells compared with their relative controls (Figure 5E-b&5F-b, Supplementary Figure 4A-b&4B-b), suggesting that p62 promotes vimentin expression not at the transcriptional level.

*Vimentin plays an important role in p62-mediated breast cancer cells invasion.*

In order to test if vimentin acted as an important mediator in p62 promoting breast cancer cells invasion, we overexpressed vimentin in both MDA-MB-231-shNC and MDA-MB-231-shp62 cells. Western blot assays were conducted to evaluate the protein levels of p62 and vimentin. As shown in Figure 6A, depletion of p62 attenuated vimentin expression, but overexpression of vimentin increased vimentin protein levels in both shNC and shp62 cells. Next, we performed the microfluidic assay to verify the effect of vimentin on p62-mediated cancer cells invasion. In accordance with previous reports, overexpressing vimentin resulted in a significant increment in the invasive ability of MDA-MB-231 cells (Figure 6C). Critically, re-constitution of vimentin expression in MDA-MB-231-shp62 cells abolished the reduction in invasive capacity (Figure 6C). Transwell invasion assay showed that both the vimentin overexpressing shNC cells and shp62 cells exhibited an increased invasive ability when compared to their relative shNC

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3 and shp62 cells, and the difference in the invasive ability of vimentin overexpressed  
4 shNC and shp62 cells was not so dramatically as the difference in shNC and shp62 cells  
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8 (Figure 6E).  
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10 In addition, we conducted shRNA-mediated vimentin suppression in both  
11 MDA-MB-231-Ctrl and MDA-MB-231-p62-OE cells. Notably, overexpressing p62  
12 caused an increment in vimentin protein expression in MDA-MB-231 cells, along with an  
13 increased invasive phenotype as indicated by both the microfluidic and Transwell assays  
14 (Figure 6B, 6D, 6F). Interestingly, knockdown of vimentin in MDA-MB-231-p62-OE  
15 cells attenuated the increased invasive ability and exhibited no significant difference in  
16 the capacity of invasion compared with vimentin knockdown MDA-MB-231-Ctrl cells  
17 (Figure 6D and 6F). Taken together, these results demonstrate that vimentin plays an  
18 essential role in p62-mediated invasion in breast cancer cells.  
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34 *p62 expression is positively correlated with vimentin protein levels in clinical breast*  
35 *cancer specimens.*  
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39 Finally, we assessed p62 and vimentin protein expression levels in clinical breast  
40 cancer specimens by Western blot analysis. The expression of vimentin was relatively  
41 higher in samples which showed much more abundant p62 expression (Figure 7A).  
42 Linear regression analysis showed a positive correlation between p62 and vimentin  
43 protein expression ( $R^2=0.7539$ ,  $P=0.0011$ ) (Figure 7B), indicating that p62  
44 overexpression is associated with high vimentin levels in clinical breast cancer tissues.  
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## 55 **Discussion**

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4 Our recent work demonstrated that the signalling adaptor p62 enhances breast  
5 cancer stem-like properties through downregulating let7a/b expression to stabilize MYC  
6 mRNA [36]. In the present study, we further focus on the role of p62 in regulation of  
7 breast cancer metastasis. Several novel findings have been observed, and they include (a)  
8 p62 expression is elevated in metastatic breast cancer and its overexpression correlates  
9 with poor prognosis (Figure 1); (b) p62 promotes invasive phenotypes of breast cancer  
10 cells *in vitro* and inhibition of p62 attenuates breast cancer metastasis and leads to  
11 decreased tumorigenicity *in vivo* (Figure 2, 3, 4 and Supplementary Figure 2); (c) p62  
12 binds to vimentin and p62 suppression downregulates vimentin protein expression  
13 (Figure 5, Supplementary Figure 3, 4); (d) Vimentin is required for p62-mediated breast  
14 cancer cells invasion (Figure 6); (e) p62 expression is positively correlated with vimentin  
15 protein levels in clinical breast cancer specimens (Figure 7).

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32 Considering that metastases are responsible for more than 90% of breast  
33 cancer-related deaths and that no available strategies to interfere with the progress  
34 effectively, the verification of reliable prognostic biomarkers and novel therapeutic  
35 targets underlying tumour metastasis is urgently needed. We report here for the first time  
36 that clinical metastatic breast cancer tissues display high levels of p62 expression (Figure  
37 1). Further analysis confirmed that p62 is required for the maintenance of breast cancer  
38 invasion and metastasis (Figure 2, 3, 4 and Supplementary Figure 2). Notably, the  
39 metastases incidence of zebrafish embryo engrafted with MCF-7 control cells was 44.1%  
40 (49/111), whereas MCF-7 cells with p62 depletion had a lower incidence of 22.2% (20/90)  
41 within the same time frame (Figure 3B). Silencing p62 expression attenuates breast  
42 cancer cells metastasis in both zebrafish embryo and mouse tail vein xenograft models  
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3 (Figure 3C, Figure 4A). Collectively, our data strongly suggest p62 as a potential target  
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5 for limiting breast cancer metastasis.  
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8         Interestingly, a recent study showed that intramuscularly administered p62-encoding  
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10 plasmid induces anti-p62 antibodies and exhibits strong antitumour activity in models of  
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12 allogeneic mouse tumours, including the Ca755 breast carcinoma [37]. p62 DNA vaccine  
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14 also decreases or stabilizes growth of locally advanced mammary tumours in dogs [38].  
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16 These two studies indicate that p62 might be a potential candidate antigen for cancer  
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18 immunotherapy. A feasible cancer antigen should be immunogenic, essential for cancer  
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20 cells but not for normal tissues to reduce the risk of toxicity, and overexpressed in  
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22 tumours as compared to the normal tissues [39]. Here, our data show that p62 is  
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24 overexpressed in breast cancer tissues relative to adjacent normal breast tissues (Figure  
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26 1A). High p62 expression levels correlate with reduced metastasis-free and relapse-free  
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28 survival times (Figure 1C and D). In agreement, previous studies also implied that p62 is  
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30 accumulated in Ras-transformed cells and it is required for Ras-induced survival and  
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32 transformation [40]. Moreover, we identified a critical role of p62 in the maintenance of  
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34 breast cancer stemness [36]. In combination, our observations reveal the dependence of  
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36 breast tumours on p62 in contrast to normal breast tissues, further expanding the  
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38 suggestion that p62 protein might be an excellent target as a cancer antigen.  
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46         The scaffold protein p62 includes several important functional domains, which  
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48 mediate the interaction with different signalling molecules to regulate cancer initiation  
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50 and progression [41, 42]. For example, p62 has been reported to promote engrafted  
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52 human skin cancer cell growth through interacting with Twist-1 and inhibiting Twist-1  
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54 autophagic degradation [43]. p62 also specially associates with mTORC1 by binding to  
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3 raptor to regulate cell growth and autophagy that integrates nutrient sensing and cell size  
4 control [10, 44, 45]. In an effort to investigate the mechanisms underlying the regulation  
5 of breast cancer metastasis by p62, we found that p62 binds to vimentin and silencing p62  
6 expression downregulates vimentin protein expression (Figure 5 and Supplementary  
7 Figure 3, 4). Most importantly, vimentin is required for p62-promoted breast cancer  
8 metastasis (Figure 6). Linear regression analysis of clinical breast cancer specimens  
9 indicated that p62 is positively correlated with vimentin protein expression (Figure 7),  
10 while in adjacent normal samples, there is no such obviously correlation between p62 and  
11 vimentin expression (Supplementary Figure 5). Still, the molecular mechanism whereby  
12 p62 regulates vimentin expression remains to be unknown. We hypothesized that p62  
13 regulates vimentin protein expression through ubiquitin-proteasome pathway. In order to  
14 test this conjecture, we performed reciprocal immunoprecipitation assay and analyzed  
15 proteins via immunoblotting. Ubiquitinated vimentin could be readily detected  
16 (Supplementary Figure 6A&B). Then we treated control and p62 knockdown  
17 MDA-MB-231 cells with MG132, a potent proteasome inhibitor, and found that the effect  
18 of p62 depletion mediated vimentin suppression was not reversed effectively  
19 (Supplementary Figure 6C). Moreover, treatment with MG132 in MCF-10A-Ctrl and  
20 MCF-10A-p62-OE cells, failed to prevent the upregulation of vimentin expression levels  
21 by p62 overexpression (Supplementary Figure 6D). Further, to confirm whether p62  
22 upregulation influences the ubiquitin of vimentin, we overexpressed p62 in HEK-293T  
23 cells and used His-tagged vimentin to co-immunoprecipitate with Flag-tagged ubiquitin  
24 in the absence or presence of MG132. The IP/IB results showed that there were no  
25 significant differences in the vimentin ubiquitinated levels in both the control and p62  
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3 overexpressing cells (Supplementary Figure 6E). Together these data indicate that  
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5 depletion of p62 downregulates vimentin protein expression independent of the  
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7 ubiquitin-proteasome pathway.  
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10 In summary, we demonstrate that the signalling adaptor p62 enhances breast cancer  
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12 metastasis through interacting with vimentin. Our findings also suggest that p62 could be  
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14 used as both the potential prognostic biomarker of metastatic breast cancer and the  
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16 therapeutic target for metastatic breast cancer treatment.  
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**Conflict of interest**

No potential conflict of interest to disclose.

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## Figure Legends

**Figure 1** p62 expression is elevated in metastatic breast cancer and its overexpression correlates with poor prognosis. (A) p62 protein levels in five pairs of clinical metastatic breast cancer (T) and adjacent normal tissues (N) were subjected to western blot analysis. (B) p62 mRNA expression levels in normal tissues and primary tumour (left) or in metastatic tumour tissues (right) were shown by analysis of gene expression value from TCGA. \*\*\* $P < 0.001$ , two-tailed Student's t-tests. Error bars represented mean  $\pm$  SD. (C) Kaplan-Meier survival analysis of 87 breast carcinoma specimens from the GEO database (GSE6532) ( $P = 0.011$ ). (D) Relapse-free survival times of 104 breast cancer samples from GEO database (GSE42568) by univariate analysis ( $P < 0.0001$ ).

**Figure 2** p62 is essential for breast cancer cells to maintain the invasive ability *in vitro*. (A) p62 protein expression was tested by Western blot and (B) p62 mRNA expression was examined by RT-qPCR assay in both the metastatic and nonmetastatic breast cancer cell lines. \*\*\* $P < 0.001$ , two-tailed Student's t-tests. Error bars represented mean  $\pm$  SD. (C) Efficiencies for knockdown or overexpression of p62 were tested by Western blot analysis. (D) Comparison of the invasive capacity in the microfluidic model by silencing p62 expression in MDA-MB-231 cells and (E) overexpressing p62 in MCF-10A cells. Scale bar, 100  $\mu\text{m}$ . \* $P < 0.05$ , \*\*\* $P < 0.001$ , two-tailed Student's t-tests. Error bars represented mean  $\pm$  SD. (F-a) Representative images of MDA-MB-231 control versus p62 knockdown cells embedded in three-dimensional matrigel culture. Scale bar, 500  $\mu\text{m}$ . (F-b) Quantification of tumour-sphere perimeter. \*\*\* $P < 0.001$ , two-tailed Student's t-tests. Error bars represented mean  $\pm$  SD.

**Figure 3** Effects of knockdown p62 on cell migration in Tra/Nac zebrafish embryos.

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3 MCF-7 cells were transfected with non-specific control or p62 siRNA respectively. Thirty  
4 embryos were injected for each group and approximately 150 CM-Dil labelled MCF-7  
5 cells were injected into each 2dpf Tra/Nac zebrafish embryos. Metastasis was measured  
6 under the fluorescent microscope at 3dpi. Some of the embryos were died at this stage.  
7  
8 (A) Tra/Nac zebrafish embryos at 2dpf transplanted with MCF-7 non-specific control and  
9 MCF-7 p62 siRNA. The implanted tumour cells can be seen in red (red fluorescent  
10 microscope). Presence of migrated tumour cells from yolk sac to the tail is indicated with  
11 a black arrow. (B) Percentage of zebrafish which presented any form of metastasis in the  
12 total number of injected zebrafish in the experiment. (C) The corrected total cell  
13 fluorescence (CTCF) was measured using the formula:  $CTCF = \text{Integrated Density} -$   
14  $(\text{Area of selected cell} \times \text{Mean fluorescence of background readings})$  for each imaged  
15 zebrafish. Scale bar, 500  $\mu\text{m}$ .  $**P < 0.01$ , two-tailed Student's t-tests. Error bars  
16 represented mean  $\pm$  SD.  
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34 **Figure 4** Inhibition of p62 attenuates breast cancer metastasis and leads to decreased  
35 tumorigenicity *in vivo*. (A) Control shRNA MDA-MB-231 and p62 shRNA  
36 MDA-MB-231 cells were injected into the lateral tail vein of 4~6 weeks old BALB/C  
37 (nu/nu) female nude mice. Macrograph of representative lungs (a) and H&E staining of  
38 lung sections (b) were presented to show metastases in lungs. The metastatic nodules  
39 were indicated with yellow arrows. Scale bar, 100  $\mu\text{m}$ . The area and number of metastatic  
40 nodules were presented as mean  $\pm$  SD (n=6) (c). (B) Immunodeficient mice were  
41 subcutaneously inoculated with equal number of control and p62 knockdown  
42 MDA-MB-231 cells ( $1 \times 10^6$  cells per mouse, n=5). Photographs of tumours (a), tumour  
43 volumes and tumour weights were shown (b).  $***P < 0.001$ , two-tailed Student's t-tests.  
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3 Error bars represented mean  $\pm$  SD.  
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5 **Figure 5** p62 binds to vimentin and p62 suppression downregulates vimentin protein  
6 expression. (A) The endogenous p62 co-immunoprecipitated (co-IP) proteins were  
7 analyzed by mass spectrometry. (B) The interaction between endogenous p62 and  
8 vimentin protein was analyzed by co-immunoprecipitation in MDA-MB-231 cells. (C) (D)  
9 Protein interaction was analyzed by glutathione S-transferase pull-down assay. Vimentin  
10 protein and mRNA levels were examined in p62 knockdown MDA-MB-231 cells (E) or  
11 p62 overexpression MCF-10A cells (F). The protein and mRNA levels of p62 and  
12 vimentin were respectively tested by Western blot and RT-qPCR assay. \*\*\*P<0.001,  
13 two-tailed Student's t-tests. Error bars represented mean  $\pm$  SD.  
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26 **Figure 6** Vimentin is required for p62-mediated breast cancer cells invasion. p62 and  
27 vimentin expression levels were assessed by Western blot assay in vimentin  
28 overexpressed control and p62 knockdown cells (A), or in shRNA-mediated vimentin  
29 suppressed control and p62 upregulation cells (B). The invasive ability was analyzed by  
30 both the microfluidic assay (C and D) and the transwell invasion assay (E and F). Scale  
31 bar, 100  $\mu$ m. \*P<0.05, \*\*P<0.01, \*\*\*P<0.001, two-tailed Student's t-tests. Error bars  
32 represented mean  $\pm$  SD.  
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43 **Figure 7** p62 expression is positively correlated with vimentin level in breast cancer  
44 specimens. (A) Both the p62 and vimentin protein expression in breast cancer specimens  
45 (n=10; T: tumour) were subjected to Western blot analysis. (B) Both the p62 and vimentin  
46 expression levels were normalized to relative GAPDH and linear regression analysis was  
47 shown.  $R^2=0.7539$ ,  $P=0.0011$ .  
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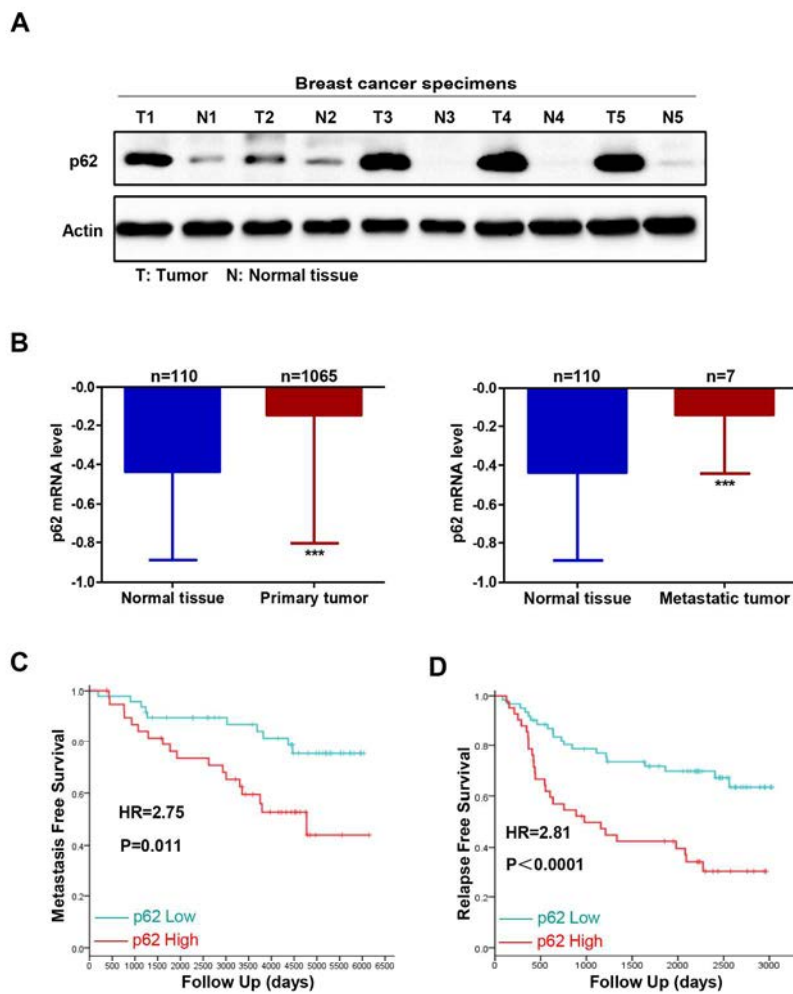


Figure 1

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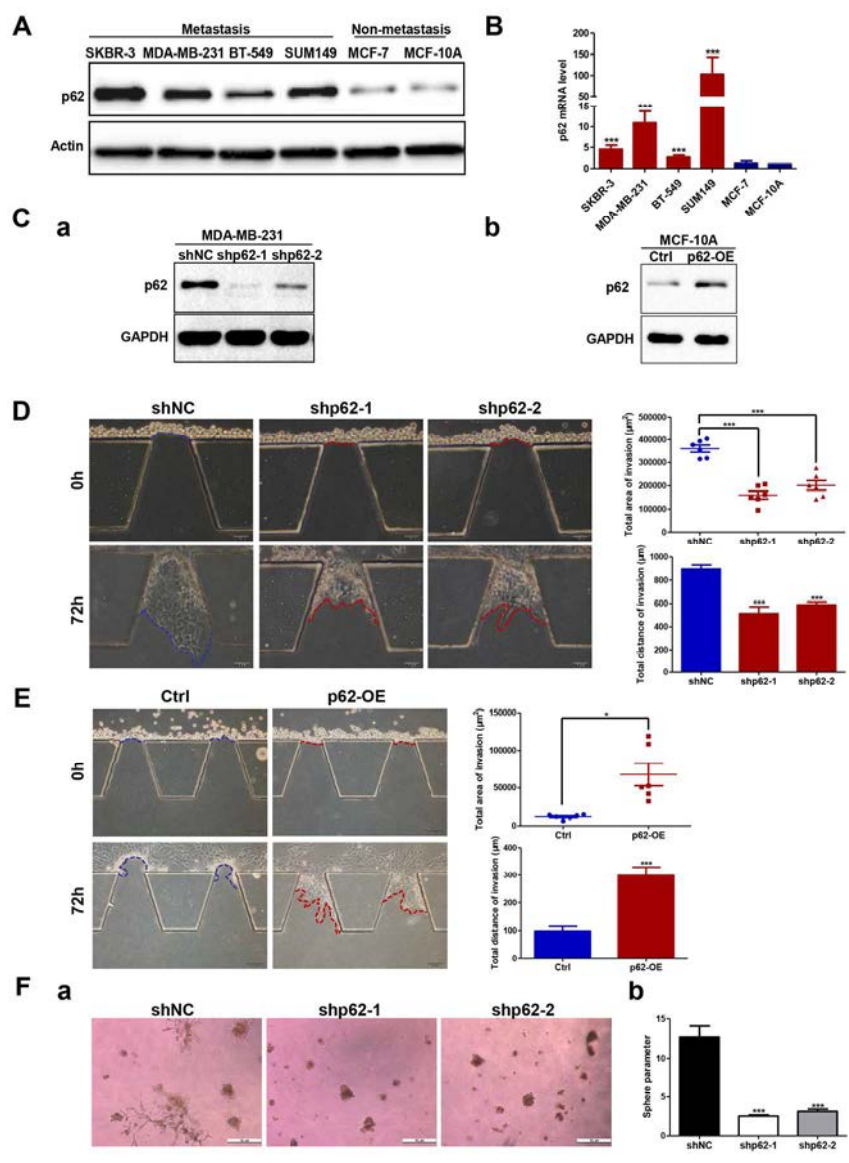


Figure 2

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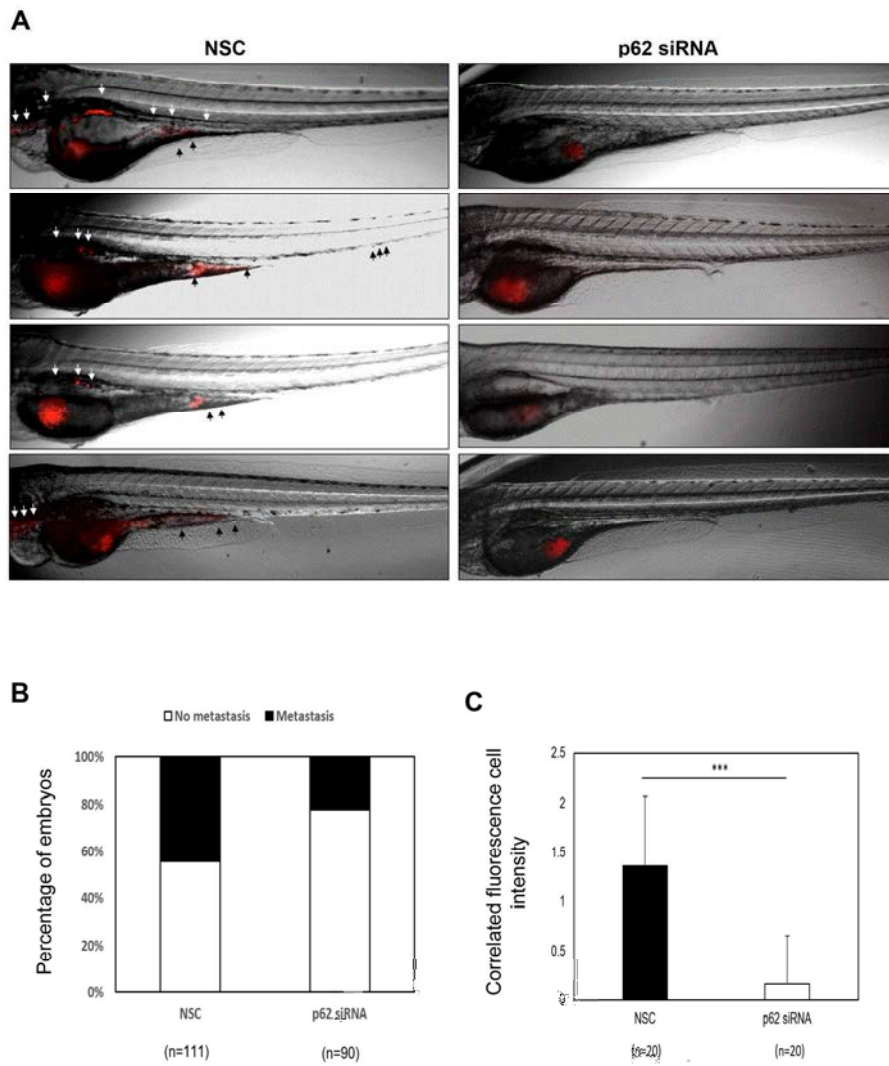


Figure 3

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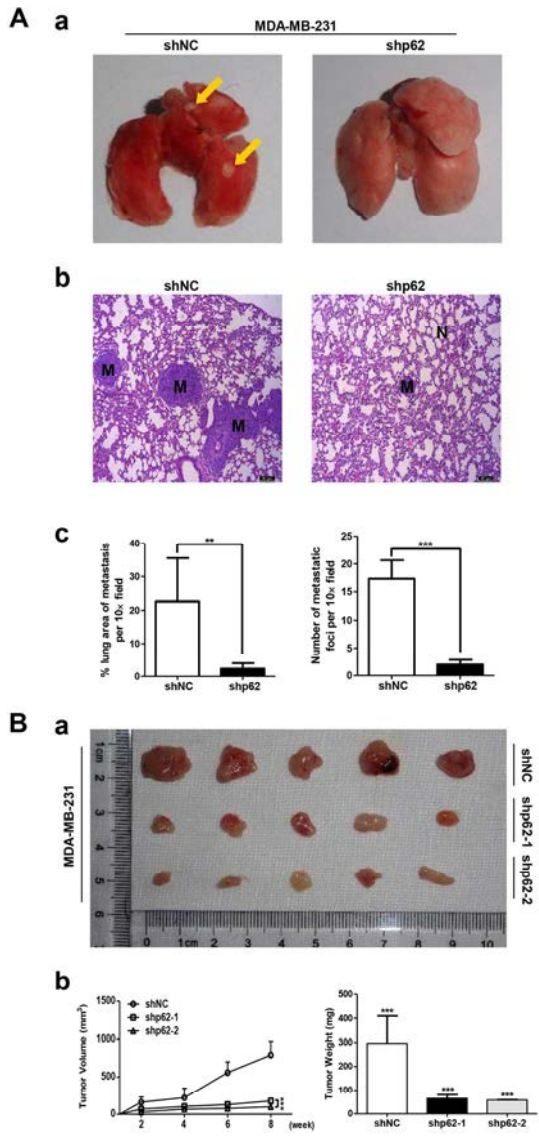


Figure 4

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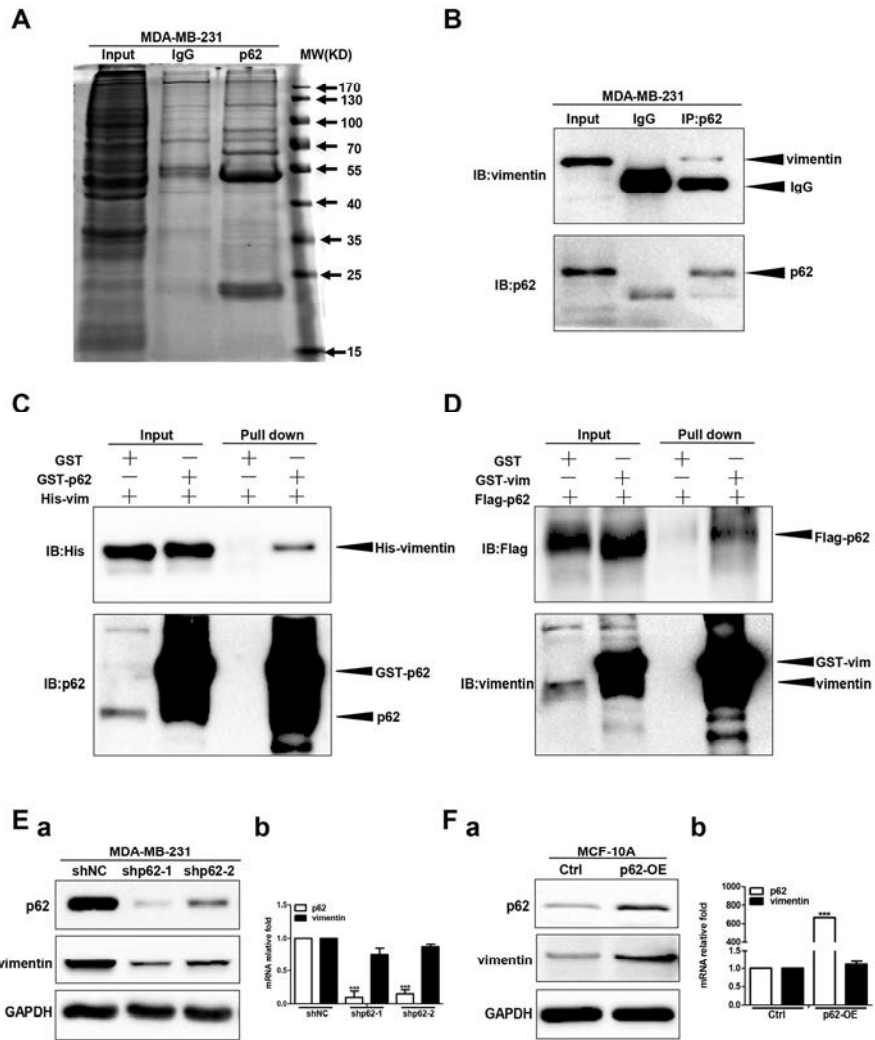


Figure 5

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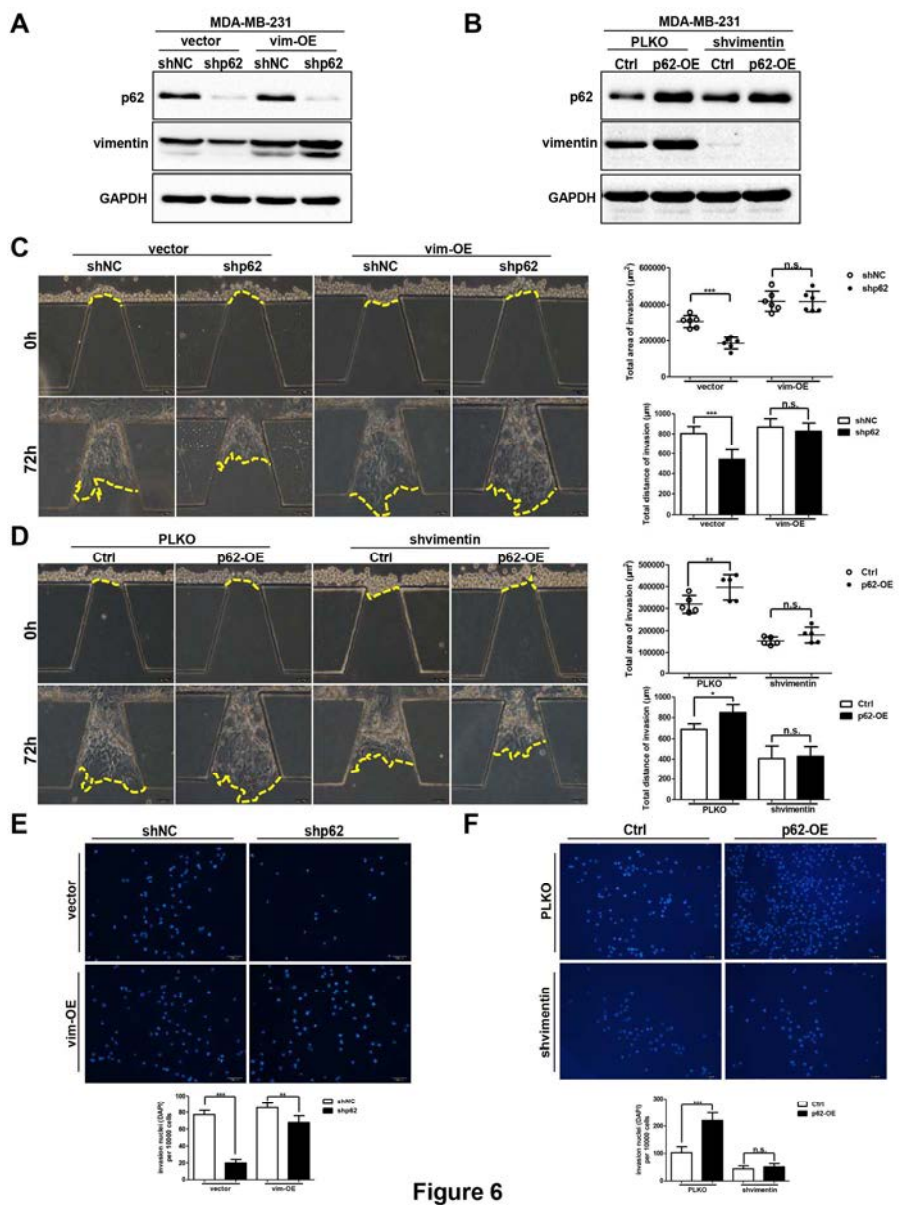


Figure 6

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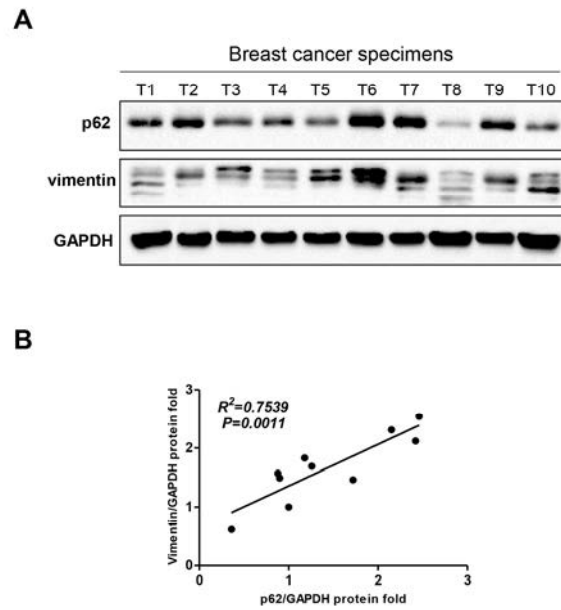
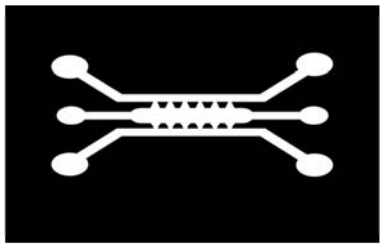


Figure 7

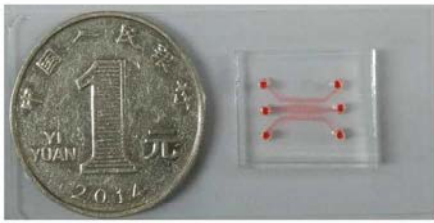
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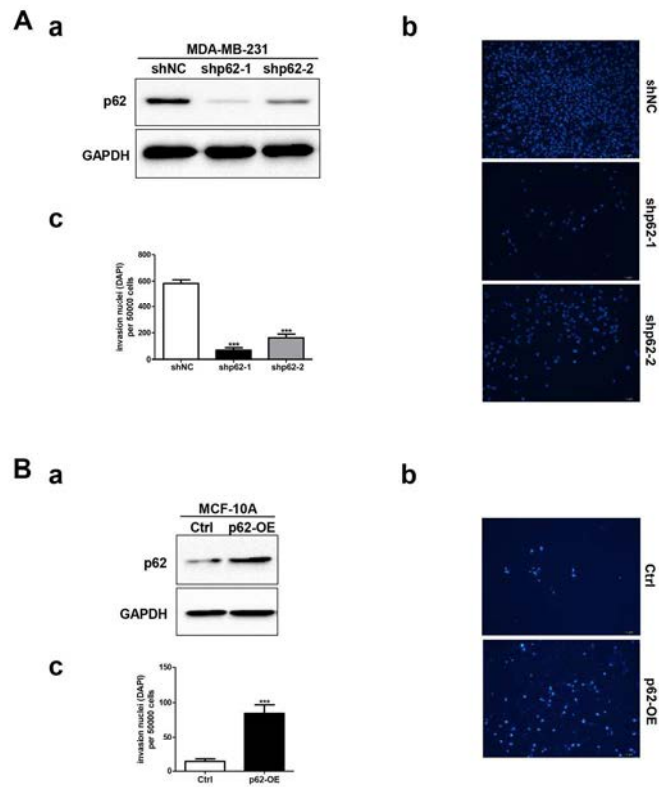


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Supplementary Figure 1

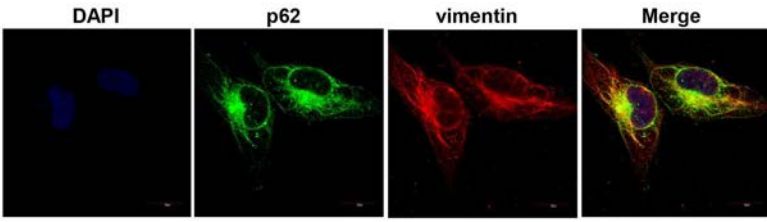
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Supplementary Figure 2

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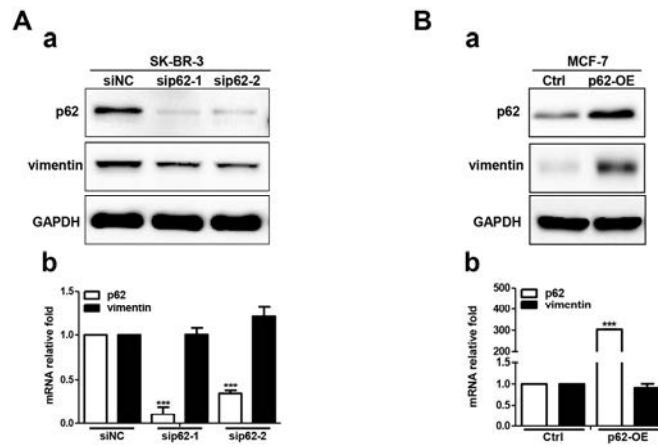
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Supplementary Figure 3

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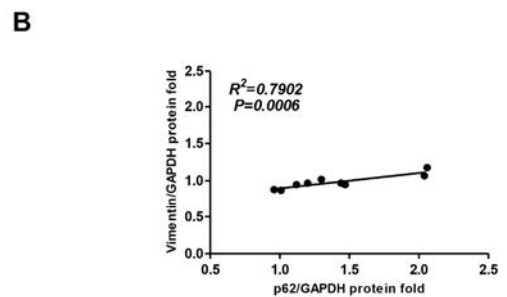
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Supplementary Figure 4

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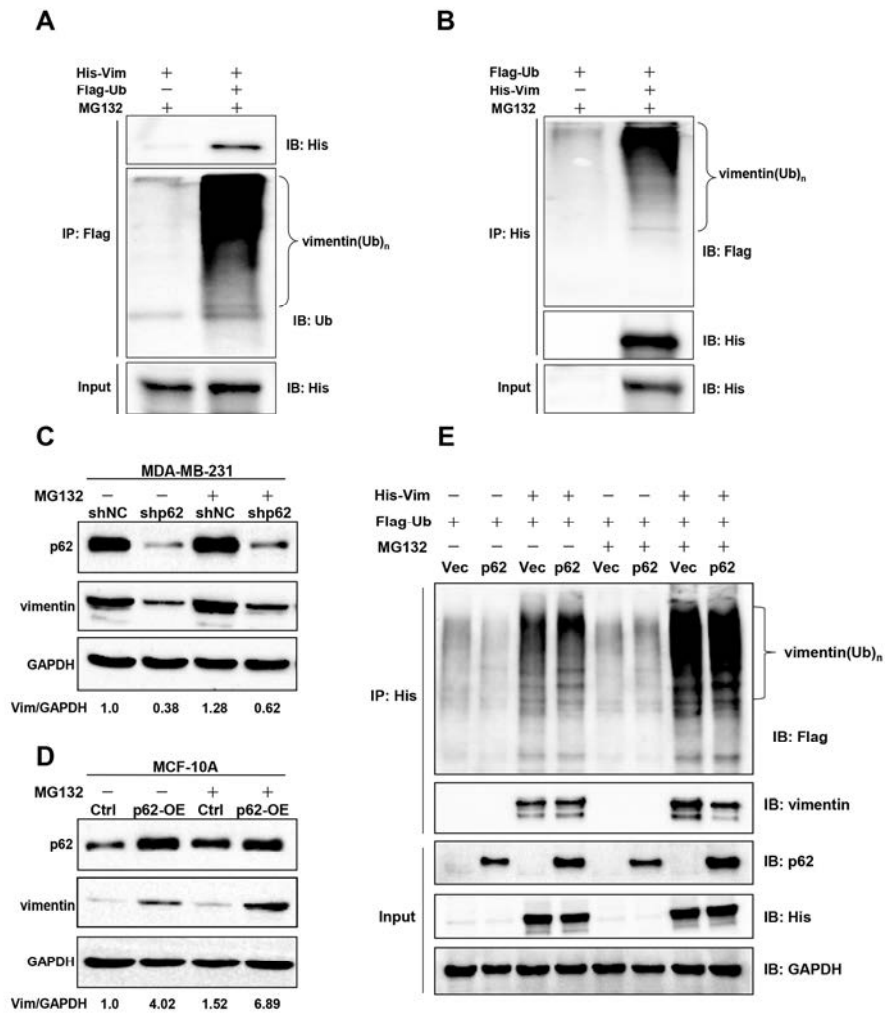
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Supplementary Figure 5

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Supplementary Figure 6

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4 **Supplementary Figure 1** (A) Model diagram and (B) photograph of the microfluidic  
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6 chip for testing cancer cells local invasion abilities. The chip is composed of one  
7  
8 central chamber and two side channels. Cancer cells in which contained 1% FBS cell  
9  
10 culture medium are seeded in one of the side channels and the other side channel is  
11  
12 injected into 10% FBS containing cell culture medium. Matrigel is mixed with same  
13  
14 volume 10% FBS containing cell culture medium and is injected into the central  
15  
16 channel.  
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21 **Supplementary Figure 2** The invasive properties of MDA-MB-231-shp62 (A) and  
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23 MCF-10A-p62-OE cells (B) together with their relative controls were analyzed by  
24  
25 Transwell invasion assay. \*\*\*P<0.001, two-tailed Student's t-tests. Error bars  
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27 represented mean  $\pm$  SD.  
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31 **Supplementary Figure 3** Immunofluorescence staining of p62 (Green) and vimentin  
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33 (Red) in MDA-MB-231 cells. Scale bars, 20  $\mu$ m.  
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37 **Supplementary Figure 4** Vimentin protein and mRNA levels were examined in p62  
38  
39 knockdown SK-BR-3 cells or p62 overexpression MCF-7 cells. The protein and  
40  
41 mRNA levels of p62 and vimentin were respectively tested by Western blot and  
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43 RT-qPCR assay. \*\*\*P<0.001, two-tailed Student's t-tests. Error bars represented mean  
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45  $\pm$  SD.  
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49 **Supplementary Figure 5** (A) Both the p62 and vimentin protein expression in breast  
50  
51 cancer adjacent normal tissues (n=10; N: normal) was subjected to Western blot  
52  
53 analysis. (B) Both the p62 and vimentin expression levels were normalized to relative  
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55 GAPDH and linear regression analysis was shown.  $R^2=0.7902$ ,  $P=0.0006$ .  
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4 **Supplementary Figure 6** (A) (B) HEK293T cells were co-transfected with  
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6 His-Vimentin and Flag-Ubiquitin in the presence of MG132. Protein interaction was  
7  
8 analyzed by co-immunoprecipitation and Western blot assay. (C) (D) The protein  
9  
10 expression levels of p62 and vimentin were examined by Western blot assay. (E)  
11  
12 Control and p62 overexpression HEK293T cells were co-transfected with  
13  
14 Flag-Ubiquitin and His-Vimentin in the presence or absence of MG132. Vimentin  
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16 ubiquitinated levels were analyzed by co-immunoprecipitation and Western blot assay.  
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## 24 **Supplementary Materials and Methods**

### 25 *Co-immunoprecipitation analysis*

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28 Protein lysates (500-1000  $\mu$ g) prepared from cultured cells. Immunocomplex  
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30 pull-down was achieved via overnight incubation of protein lysates with relevant  
31  
32 antibodies bound to Protein G-Agarose (Roche) or with Glutathione Sepharose beads  
33  
34 (GE Healthcare) alone at 4°C. After careful washing, loading buffer was added, and  
35  
36 the samples were boiled at 100°C for 10 min. Co-immunoprecipitated proteins were  
37  
38 then subjected to Western blot as described above.  
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### 44 *In-Gel Trypsin Digestion*

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46 p62 and interacting proteins that were co-immunoprecipitated as described above  
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48 were solubilized in 1.5  $\times$  SDS sample buffer (15% glycerol, 60 mM Tris [pH 6.8], 3%  
49  
50 SDS, 7.5%  $\beta$ -mercaptoethanol) and run on SDS-PAGE. After migration, the gels were  
51  
52 fixed, and proteins were detected with Coomassie blue staining. p62  
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54 immunoprecipitated protein bands and IgG control group protein bands were cut out  
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4 of the gels and rinsed three times in deionized water. Gel slices ( $\leq 1$  mm) were  
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6 incubated with 100 mM ammonium bicarbonate buffer for 15 min at 4°C. The  
7  
8 supernatant was then removed, and samples were then mixed with 50% acetonitrile  
9  
10 for shaking 10 min at 4°C to dehydrate the gel pieces. Re-incubate with 100 mM  
11  
12 ammonium bicarbonate buffer for 15 min at 4°C and then mixed with 100%  
13  
14 acetonitrile for shaking 10 min at 4°C. After dehydrating the gels, samples were  
15  
16 incubated with DTT for 2 hours at 37°C. Following incubation, IAA was replaced with  
17  
18 DTT and further incubated for 1 hour at 25°C in darkness. Then samples were dealt  
19  
20 with 50% acetonitrile, 50 mM ammonium bicarbonate and 100% acetonitrile  
21  
22 sequentially. Finally, dried gels were covered with 500  $\mu$ l trypsin solution (12.5 ng/ $\mu$ l  
23  
24 in 25 mM ammonium bicarbonate) and in-gel digestion was performed at 37°C  
25  
26 overnight. The digested sample was prepared for mass spectrometry analysis as  
27  
28 follows. Firstly, supernatant was transferred into a new tube and precipitants were  
29  
30 incubated with 150  $\mu$ l 25 mM ammonium bicarbonate for 10 min at 4°C, then put the  
31  
32 supernatant into the same tube. Secondly, precipitants were added 250  $\mu$ l buffer  
33  
34 (ACN : TFA=94 : 6) for shaking 10 min at 4°C and transferred into the same tube.  
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36 Thirdly, dried the supernatant and store at -20°C. Finally, dissolved the samples in 0.1%  
37  
38 FA totally and then prepared for mass spectrometric analysis.

#### 39 40 41 42 43 44 45 46 47 48 49 *Mass Spectrometry*

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51 Peptides were analyzed on LTQ XL mass spectrometer (Thermo, San Jose, CA)  
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53 with 1D RPLC separating system in the positive ion mode. The control and  
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55 experiment group were respectively loaded onto and separated by a C18 capillary  
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4 column (Thermo, BioBasic-18, 150\*0.1) with a 120 min RP gradient elution. A  
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6 Finnigan surveyor MS pump (Thermo, San Jose, CA, USA) was used to deliver the  
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8 mobile phase consisted of mobile A, 0.1% (v/v) formic acid in water, and mobile  
9  
10 phase B, 0.1% (v/v) formic acid in ACN. The flow rate was adjusted to 300 $\mu$ L/min  
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12 without splitting. The gradients elution was performed with gradients of 2–35% B in  
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14 90 min, 35–80% B in 2 min, 80% B in 10 min, 80% B–98% A in 3 min and 98% A in  
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16 20 min. All MS and MS/MS spectra were acquired in the data-dependent analysis  
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18 mode, in which the 10 most intense ions with MS scan were selected for MS/MS scan  
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20 by collision-induced dissociation (CID). All MS/MS spectra were searched using  
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22 Proteome Discoverer (Version 1.3.0.339) against NCBI protein database  
23  
24 (human20141121) with 1% false discovery rate (FDR). The parameters were set as  
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26 follows: precursor-ion mass tolerance, 2 Da; fragment-ion mass tolerance, 1 Da;  
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28 enzyme, trypsin (KR/P); missed cleavage, 2; static modification, Cys (+57.021 Da);  
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30 dynamic modifications methionine (+15.995 Da). The results were shown in  
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32 Supplementary Table 2 and 3.  
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#### 41 *Immunofluorescence staining*

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44 To determine the localization of p62 and vimentin, we performed  
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46 immunofluorescence assay. In brief, cells were plated on coverslips to 30%  
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48 confluence and then fixed in 4% para-formaldehyde-PBS at room temperature for 20  
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50 minutes and permeabilized in 0.5% Triton X-100 in PBS for 10 minutes at 4°C. Cells  
51  
52 were then blocked with 1% BSA and incubated with primary antibody against both  
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54 p62 (Santa Cruz, sc-28359) and vimentin (Cell Signaling Technology, 5741s),  
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3 followed by a FITC conjugated second antibody (Invitrogen), counterstained with  
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5 DAPI (1  $\mu\text{g}/\mu\text{l}$ ), and visualized using a confocal microscope (Leica).  
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9 *Statistical analysis*

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11 The two-tailed Student's t-tests was used to perform a statistical comparison  
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13 between two groups. Statistical tests were performed using the SPSS software,  
14  
15 version 16.0 (SPSS Inc.) or with GraphPad Prism 5.0 (GraphPad Software, Inc.). The  
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17 level of statistical significance was set at \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001.  
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Gene	Formard (5'-3')	Reverse (5'-3')
p62	AGGCGCACTACCGCGAT	CGTCACTGGAAAAGGCAACC
Actin	TTGCCGACAGGATGCAGAAGGA	AGGTGGACAGCGAGGCCAGGAT
Vimentin	GTCCACTGAGTACCGGAGACA	TAGTTAGCAGCTTCAACGGCAA

For Peer Review

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Accession	Description	Score	Coverage	# Proteins	# Unique Peptides	# Peptides	# PSMs	# AAs	MW [kDa]	calc. pI
6166599	RecName: Full=Myosin-9; AltName: Full=Cellular myosin heavy cha	668.79	63.88	64	51	150	224	1960	226.4	5.60
239938886	RecName: Full=Keratin, type I cytoskeletal 9; AltName: Full=Cytoke	218.96	58.75	8	27	29	71	623	62.0	5.24
160332335	RecName: Full=Neuroblast differentiation-associated protein AHNAK	54.48	16.28	21	20	22	29	5890	628.7	6.15
123648	RecName: Full=Heat shock cognate 71 kDa protein; AltName: Full=	94.96	37.93	32	19	25	34	646	70.9	5.52
221042022	unnamed protein product [Homo sapiens]	74.88	34.74	14	19	20	25	665	72.4	5.94
63087903	unnamed protein product [Homo sapiens]	3027.34	66.67	17	17	17	914	231	24.3	7.91
238054406	RecName: Full=Keratin, type II cytoskeletal 1; AltName: Full=67 kD	577.20	64.60	52	17	52	196	644	66.0	8.12
194387918	unnamed protein product [Homo sapiens]	150.14	49.72	32	16	28	55	535	57.8	8.00
119614804	clathrin, heavy polypeptide (Hc), isoform CRA_d [Homo sapiens]	50.27	13.36	23	16	16	17	1639	187.8	5.69
386758	GRP78 precursor, partial [Homo sapiens]	53.50	32.77	12	15	18	19	653	72.1	5.14
90110781	RecName: Full=Nucleolin; AltName: Full=Protein C23	39.85	23.10	12	15	17	18	710	76.6	4.70
485601457	Chain C, Structure Of The Human 60s Ribosomal Proteins	39.67	30.44	11	14	14	16	427	47.7	11.06
119581085	keratin 10 (epidermolytic hyperkeratosis; keratosis palmaris et plant	476.16	56.73	56	13	39	158	624	63.3	5.21
21757045	unnamed protein product [Homo sapiens]	73.04	48.90	72	13	20	24	454	52.4	5.06
52545822	hypothetical protein [Homo sapiens]	33.27	36.90	36	13	14	14	374	40.5	7.01
31092	unnamed protein product [Homo sapiens]	48.75	25.76	39	12	12	19	462	50.1	9.01
119578453	alpha tubulin, isoform CRA_b [Homo sapiens]	41.91	43.75	51	12	12	15	416	46.3	5.08
1195531	type I keratin 16 [Homo sapiens]	135.27	50.95	30	11	23	51	473	51.2	5.05
194382178	unnamed protein product [Homo sapiens]	63.06	21.70	9	10	10	20	530	56.8	6.87
425518	anti-colorectal carcinoma heavy chain [Homo sapiens]	61.27	30.35	5	10	10	21	458	50.6	6.67
190192184	filamin A [Homo sapiens]	34.55	7.56	33	10	13	13	2315	245.7	5.97
119605386	DEAD (Asp-Glu-Ala-Asp) box polypeptide 41, isoform CRA_a [Homo	30.60	24.40	11	10	10	10	496	55.4	8.18
332164777	pyruvate kinase PKM isoform d [Homo sapiens]	24.70	24.51	77	9	9	10	457	49.9	7.83
119597993	annexin A2, isoform CRA_c [Homo sapiens]	22.73	35.54	14	9	9	9	287	32.4	6.29
35903	ribosomal protein L7 [Homo sapiens]	19.91	34.68	14	9	9	9	248	29.2	10.61
109734611	Myosin, heavy chain 10, non-muscle [Homo sapiens]	102.34	15.69	65	8	29	39	1976	228.8	5.54
578804832	PREDICTED: titin isoform X5 [Homo sapiens]	51.02	0.63	31	8	16	24	35484	3935.9	6.43
431822406	heat shock protein HSP 90-beta isoform b [Homo sapiens]	40.55	19.97	49	8	14	17	676	78.2	5.05
378404908	glyceraldehyde-3-phosphate dehydrogenase isoform 2 [Homo sapie	32.55	29.35	13	8	8	13	293	31.5	7.61
27436948	lamin isoform A-delta10 [Homo sapiens]	23.74	18.14	27	8	9	9	634	70.6	8.40
119592222	ribosomal protein S4, X-linked, isoform CRA_b, partial [Homo sapier	23.72	31.17	17	8	8	10	231	26.1	9.99
189502784	mitochondrial heat shock 60kD protein 1 variant 1 [Homo sapiens]	23.65	17.40	19	8	8	8	569	60.6	6.04
119608213	spectrin, alpha, non-erythrocytic 1 (alpha-fodrin), isoform CRA_c [H	21.41	4.12	33	8	8	8	2427	279.3	5.36
119602167	dynein, cytoplasmic 1, heavy chain 1, isoform CRA_c [Homo sapiens	30.66	3.47	35	7	9	11	4236	485.7	6.35
18490263	Ribosomal protein L6 [Homo sapiens]	29.22	26.74	21	7	7	12	288	32.7	10.61
76496472	60S ribosomal protein L3 isoform b [Homo sapiens]	23.97	22.03	23	7	8	9	354	40.1	10.23
40353734	nucleophosmin isoform 2 [Homo sapiens]	22.97	41.89	47	7	7	7	265	29.4	4.61
485601423	Chain K, Structure Of The Human 60s Ribosomal Proteins	21.59	53.33	10	7	7	9	165	17.8	9.42





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119578438	myeloid/lymphoid or mixed-lineage leukemia 2, isoform CRA_a [Hor	13.11	1.04	9	4	4	6	4539	487.1	6.58
116241330	RecName: Full=ATP-dependent RNA helicase A; Short=RHA; AltName	13.03	4.96	13	4	5	5	1270	140.9	6.84
119580409	hCG2010544 [Homo sapiens]	12.77	40.74	101	4	5	5	135	15.6	9.61
179212	Na+ K+ ATPase alpha subunit, partial [Homo sapiens]	12.11	7.51	52	4	5	5	746	81.7	5.22
23491735	ribosomal protein L10a [Homo sapiens]	12.09	23.50	7	4	5	5	217	24.8	9.94
119615215	karyopherin (importin) beta 1, isoform CRA_b [Homo sapiens]	11.19	6.38	11	4	4	5	846	93.8	4.77
119569329	hCG1640785, isoform CRA_a [Homo sapiens]	10.88	27.42	5	4	4	6	124	13.6	9.99
23712	myoblast antigen 24.1D5 [Homo sapiens]	10.75	14.39	10	4	4	4	396	45.2	6.76
578829803	PREDICTED: myosin phosphatase Rho-interacting protein isoform X	10.04	2.13	26	4	4	4	2301	260.4	5.49
194378812	unnamed protein product [Homo sapiens]	10.03	14.77	7	4	4	4	352	38.9	4.94
119595171	protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF),	9.93	7.52	21	4	4	4	917	103.7	6.76
915392	fatty acid synthase [Homo sapiens]	9.49	2.43	10	4	4	4	2509	272.9	6.42
15342049	Ribosomal protein S6 [Homo sapiens]	9.34	18.47	24	4	4	4	249	28.7	10.90
530418509	PREDICTED: eukaryotic translation initiation factor 2 subunit 2 isofo	9.26	19.11	11	4	4	4	314	36.2	5.48
4930167	Chain A, Human Muscle Aldolase	9.10	12.40	32	4	4	4	363	39.3	8.09
1096938	ribosomal protein L5	8.52	12.46	9	4	4	4	297	34.4	9.74
158254664	unnamed protein product [Homo sapiens]	60.44	28.91	61	3	10	21	377	42.0	5.39
56757569	RecName: Full=Tubulin beta chain; AltName: Full=Tubulin beta-5 cl	48.50	36.94	52	3	13	17	444	49.6	4.89
114155144	tropomyosin alpha-3 chain isoform 4 [Homo sapiens]	28.90	35.89	72	3	10	10	248	28.9	4.75
386785	heat shock protein [Homo sapiens]	28.82	17.81	33	3	11	12	640	69.8	5.58
75517570	HNRPA1 protein [Homo sapiens]	25.17	26.22	36	3	6	8	267	29.4	9.14
578813467	PREDICTED: heterogeneous nuclear ribonucleoproteins A2/B1 isofo	19.20	15.34	13	3	5	6	313	33.9	9.03
45219787	Ribosomal protein S3A [Homo sapiens]	18.82	35.61	30	3	8	8	264	30.0	9.73
40788231	KIAA0373 [Homo sapiens]	17.51	2.27	26	3	5	10	1540	180.1	6.80
119607089	protein kinase, DNA-activated, catalytic polypeptide, isoform CRA_d	16.66	1.49	12	3	5	8	4033	458.5	7.08
47077415	unnamed protein product [Homo sapiens]	16.62	3.96	7	3	5	9	1340	150.9	8.22
14278227	Chain B, Nmr Structure Of Dff40 And Dff45 N-Terminal Domain Cor	16.29	25.52	4	3	3	4	145	16.1	4.79
51476783	hypothetical protein [Homo sapiens]	15.59	2.66	8	3	4	8	1504	166.1	8.43
119621384	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation	15.57	22.04	35	3	5	6	245	27.7	4.78
52545677	hypothetical protein [Homo sapiens]	15.48	8.90	22	3	5	6	652	72.5	8.59
209572633	RecName: Full=Inositol 1,4,5-trisphosphate receptor type 3; AltName	15.25	2.73	32	3	5	7	2671	303.9	6.48
193786214	unnamed protein product [Homo sapiens]	14.07	4.80	15	3	4	7	688	78.6	8.84
34395763	RecName: Full=Regulating synaptic membrane exocytosis protein 1	12.54	1.95	40	3	3	6	1692	189.0	9.66
4503507	eukaryotic translation initiation factor 2 subunit 3 [Homo sapiens]	12.19	13.14	7	3	5	5	472	51.1	8.40
119599909	golgi autoantigen, golgin subfamily b, macrogolgin (with transmemt	11.47	1.74	96	3	6	6	3225	372.0	5.01
119620549	spectrin, beta, non-erythrocytic 1, isoform CRA_f [Homo sapiens]	10.82	2.70	13	3	4	4	2150	250.8	5.43
578822859	PREDICTED: L-lactate dehydrogenase B chain isoform X1 [Homo sa	10.60	11.90	5	3	3	3	353	39.4	8.90
119580970	ribosomal protein L19, isoform CRA_b [Homo sapiens]	10.47	20.62	20	3	5	5	194	23.2	11.47
13097600	Similar to ribosomal protein L23, partial [Homo sapiens]	10.42	29.85	6	3	3	4	134	14.1	10.26



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256542310	dynein heavy chain 17, axonemal [Homo sapiens]	126.80	1.14	7	2	3	52	4462	509.0	5.72
41322910	plectin isoform 1d [Homo sapiens]	116.24	11.23	41	2	43	44	4515	512.3	5.77
119585106	hCG1790160 [Homo sapiens]	60.14	4.75	2	2	2	28	589	67.9	8.62
327478526	RecName: Full=Myosin-14; AltName: Full=Myosin heavy chain 14; A	50.36	6.12	60	2	13	20	1995	227.7	5.60
193785954	unnamed protein product [Homo sapiens]	45.37	14.83	55	2	7	17	445	49.0	5.48
193785596	unnamed protein product [Homo sapiens]	31.86	27.46	15	2	9	12	397	44.6	4.93
40225472	CERCAM protein [Homo sapiens]	20.73	12.00	11	2	2	9	275	31.2	5.33
62988667	unknown [Homo sapiens]	19.06	12.23	7	2	2	10	188	21.3	8.41
74750718	RecName: Full=Ankyrin repeat and KH domain-containing protein 1	18.86	1.26	32	2	3	8	2542	269.3	5.73
119629468	hCG2011852 [Homo sapiens]	18.37	1.17	95	2	8	9	6929	784.5	8.88
29649737	protease serine 1 [Homo sapiens]	18.25	46.43	9	2	2	7	84	9.1	9.57
530392546	PREDICTED: glycolipeptide N-tetradecanoyltransferase 2 isoform X1	16.33	6.87	20	2	2	7	495	56.7	7.75
308153675	RecName: Full=Spectrin alpha chain, erythrocytic 1; AltName: Full=	16.19	2.11	9	2	3	7	2419	279.8	5.05
109731497	Myosin, heavy chain 1, skeletal muscle, adult [Homo sapiens]	14.57	3.92	123	2	6	7	1939	223.0	5.78
108935939	RecName: Full=Transferrin receptor protein 1; Short=TR; Short=Tff	13.79	4.47	9	2	2	6	760	84.8	6.61
76150625	putative ribosomal RNA methyltransferase NOP2 isoform 1 [Homo s	13.67	4.83	8	2	3	7	808	88.9	9.23
40225951	DIS3L protein [Homo sapiens]	13.61	5.28	8	2	2	6	644	73.1	6.23
578836318	PREDICTED: trafficking protein particle complex subunit 10-like [Ho	13.59	16.87	9	2	2	6	249	27.5	6.05
193783825	unnamed protein product [Homo sapiens]	13.16	2.83	10	2	3	7	883	101.0	7.08
578829750	PREDICTED: dynein heavy chain 9, axonemal isoform X1 [Homo sap	13.14	1.16	28	2	4	7	3869	441.5	6.04
578832590	PREDICTED: zinc finger protein 407 isoform X3 [Homo sapiens]	13.01	1.23	8	2	2	7	1628	180.5	6.93
578809969	PREDICTED: uncharacterized protein C5orf42 isoform X12 [Homo sa	13.00	1.22	7	2	3	7	2792	316.0	6.95
1147783	myosin-IXb [Homo sapiens]	12.89	1.83	52	2	4	7	2022	228.5	9.29
34535977	unnamed protein product [Homo sapiens]	12.86	4.63	4	2	2	5	627	72.9	7.85
50409856	aftiphilin isoform c [Homo sapiens]	12.65	3.85	11	2	2	6	908	99.3	4.55
223462007	CDC42BPA protein [Homo sapiens]	12.44	2.88	22	2	3	5	1699	193.5	6.70
29865	CENP-E [Homo sapiens]	12.15	1.54	8	2	4	6	2663	311.9	5.58
119592825	NACHT, leucine rich repeat and PYD containing 13, isoform CRA_a [	12.07	1.52	11	2	2	6	985	112.7	5.44
119584691	TBC1 domain family, member 5, isoform CRA_a [Homo sapiens]	12.00	6.04	7	2	3	5	795	89.0	6.70
119600270	olfactory receptor, family 5, subfamily K, member 4 [Homo sapiens]	11.87	8.72	1	2	2	6	321	36.7	8.10
78101741	Chain A, 14-3-3 Protein Beta (human) In Complex With Exoenzyme	11.84	19.59	31	2	4	5	245	28.2	4.91
229526	protein Rei,Bence-Jones	11.65	24.77	62	2	3	4	214	23.5	8.50
343183427	coiled-coil domain-containing protein 40 isoform 2 [Homo sapiens]	11.44	2.91	18	2	3	5	1030	116.7	5.43
118572619	RecName: Full=Adenylate cyclase type 5; AltName: Full=ATP pyrop	11.41	3.01	21	2	3	5	1261	138.8	7.24
119601288	spectrin, beta, erythrocytic (includes spherocytosis, clinical type I), i	11.16	2.15	67	2	5	6	2328	267.6	5.36
194381100	unnamed protein product [Homo sapiens]	11.10	7.42	15	2	5	5	701	81.5	5.81
119625664	annexin A5, isoform CRA_c [Homo sapiens]	10.98	20.82	11	2	4	4	293	32.9	5.05
3399676	R31180_1 [Homo sapiens]	10.91	2.82	15	2	4	6	1384	151.7	6.80
530426392	PREDICTED: fatty-acid amide hydrolase 2 isoform X6 [Homo sapien	10.72	9.09	9	2	2	4	341	37.1	9.10



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119580109	myosin XVIIIIB, isoform CRA_c [Homo sapiens]	7.32	1.35	15	2	4	4	2080	233.5	6.71
119602845	hypothetical protein FLJ20425, isoform CRA_a [Homo sapiens]	7.30	7.12	4	2	3	3	379	43.6	9.57
296164	156 kDa Protein [Homo sapiens]	7.28	3.24	1	2	3	3	1356	156.0	5.63
296453080	RecName: Full=WD repeat-containing protein 87; AltName: Full=Te	7.23	1.81	78	2	4	4	2873	333.0	7.28
74758950	RecName: Full=Nucleolar protein 8; AltName: Full=Nucleolar protein	7.21	2.74	84	2	4	4	1167	131.5	7.09
1710248	protein disulfide isomerase-related protein 5 [Homo sapiens]	7.15	9.26	15	2	2	2	421	46.2	5.08
119629155	KIAA0853, isoform CRA_a [Homo sapiens]	7.07	1.98	77	2	4	4	1564	184.7	9.47
232096	RecName: Full=Peptidyl-prolyl cis-trans isomerase FKBP3; Short=PF	6.98	12.05	5	2	2	3	224	25.2	9.28
119597450	KIAA1505 protein, isoform CRA_d [Homo sapiens]	6.94	4.77	12	2	4	4	923	109.0	8.48
4455035	pseudouridine synthase 1 [Homo sapiens]	6.91	4.93	7	2	2	3	365	41.0	7.97
356168	histone H1b	6.88	12.84	7	2	3	3	218	21.7	11.03
578805858	PREDICTED: CLIP-associating protein 2 isoform X24 [Homo sapiens]	6.88	2.73	35	2	2	3	1062	115.7	9.32
14250630	XAB2 protein, partial [Homo sapiens]	6.85	3.78	106	2	3	3	635	73.2	5.38
3121763	RecName: Full=Actin-related protein 2/3 complex subunit 1B; AltNa	6.81	6.72	1	2	2	3	372	40.9	8.35
57013082	RecName: Full=Transcription initiation factor TFIID subunit 1-like; A	6.77	3.83	2	2	3	3	1826	207.2	5.40
62089472	IQGAP1 protein, partial [Homo sapiens]	6.74	2.65	7	2	3	4	943	107.5	5.91
119569007	synaptotagmin binding, cytoplasmic RNA interacting protein, isoform	6.72	6.83	18	2	3	3	410	46.3	8.88
578807160	PREDICTED: MDS1 and EVI1 complex locus protein EVI1 isoform X1	6.64	5.35	32	2	3	3	841	93.9	6.62
119613451	nuclear transcription factor, X-box binding-like 1, isoform CRA_e [H	6.58	5.68	9	2	3	3	616	69.8	8.46
12006350	60S ribosomal protein L15 [Homo sapiens]	6.53	14.22	11	2	2	2	204	24.1	11.62
194385134	unnamed protein product [Homo sapiens]	6.44	2.70	66	2	3	4	370	41.9	9.03
50512435	HSPC069 isoform a [Homo sapiens]	6.44	1.70	6	2	3	3	2061	231.0	5.68
158513765	RecName: Full=Putative protein FAM90A9P	6.36	5.17	20	2	2	3	464	49.7	9.86
119574171	sequestosome 1, isoform CRA_a [Homo sapiens]	6.34	9.39	10	2	2	2	394	42.5	5.44
578808176	PREDICTED: SH3 domain and tetratricopeptide repeat-containing pr	6.30	3.64	27	2	3	3	1043	115.0	6.58
181608	desmoplakin, partial [Homo sapiens]	6.27	2.23	13	2	3	3	1752	201.2	7.01
578824845	PREDICTED: neurobeachin isoform X6 [Homo sapiens]	6.25	2.07	14	2	2	3	1934	212.6	6.10
221042302	unnamed protein product [Homo sapiens]	6.22	10.20	7	2	3	3	392	44.9	7.87
519672462	immunoglobulin A heavy chain variable region, partial [Homo sapier	6.15	15.70	4	2	2	2	121	13.2	5.87
38014595	RRBP1 protein, partial [Homo sapiens]	6.10	4.27	10	2	2	2	655	73.6	4.93
120587027	ubiquitin carboxyl-terminal hydrolase 31 [Homo sapiens]	6.05	2.81	9	2	3	3	1352	146.6	9.22
194378958	unnamed protein product [Homo sapiens]	6.03	1.52	11	2	3	3	987	110.7	6.83
194380952	unnamed protein product [Homo sapiens]	6.03	12.82	8	2	3	3	234	26.4	8.82
221042358	unnamed protein product [Homo sapiens]	6.02	11.67	6	2	2	2	240	27.5	5.94
253722065	Chain B, Human Platelet Profilin Complexed With The L-Pro10 Peptid	5.99	23.19	5	2	2	2	138	14.8	8.27
119613224	DEAH (Asp-Glu-Ala-His) box polypeptide 15, isoform CRA_e [Homo	5.97	5.21	8	2	2	2	499	56.5	8.50
196049606	Chain A, Pcbp2 Kh1-Kh2 Domains	5.94	18.13	16	2	2	2	160	17.0	8.59
10435893	unnamed protein product [Homo sapiens]	5.93	3.43	17	2	3	4	1137	130.2	7.25
16552890	unnamed protein product [Homo sapiens]	5.80	6.09	17	2	2	3	345	37.1	9.03





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85397060	Tyrosine hydroxylase [Homo sapiens]	4.63	9.66	7	2	2	2	497	55.6	6.11
119625474	hCG38879 [Homo sapiens]	4.61	1.78	2	2	2	2	2186	243.3	6.39
3088338	ribosomal protein S10 [Homo sapiens]	4.58	32.05	8	2	2	2	78	9.4	9.44
221046210	unnamed protein product [Homo sapiens]	4.56	12.04	4	2	2	2	299	32.9	7.25
32425649	EIF4B protein, partial [Homo sapiens]	4.56	9.17	13	2	2	2	349	39.2	7.43
530365070	PREDICTED: histone-lysine N-methyltransferase ASH1L isoform X2 [Homo sapiens]	4.52	1.24	9	2	2	2	2663	296.8	9.47
119600210	ABI gene family, member 3 (NESH) binding protein, isoform CRA_a [Homo sapiens]	4.52	12.70	51	2	2	2	370	40.8	9.55
485601388	Chain U, Structure Of The Human 40s Ribosomal Proteins	4.51	15.13	3	2	2	2	119	13.4	9.94
13603893	testis protein TEX15 [Homo sapiens]	4.51	1.11	5	2	2	2	2789	315.2	6.20
56554487	Chain B, Experimentally Phased Structure Of Human The Son Of Ser	4.48	2.48	16	2	2	2	847	98.7	6.52
20521660	KIAA0788 protein [Homo sapiens]	4.45	1.38	18	2	2	2	2026	231.6	5.88
530383144	PREDICTED: unconventional myosin-VI isoform X2 [Homo sapiens]	4.44	2.41	12	2	2	2	1285	148.5	8.53
119594856	cofilin 1 (non-muscle), isoform CRA_a [Homo sapiens]	4.42	16.78	8	2	2	2	149	16.8	8.35
1549241	SWI/SNF complex 170 KDa subunit [Homo sapiens]	4.40	1.98	13	2	2	2	1213	132.6	5.52
119620847	hypothetical protein FLJ20272, isoform CRA_b, partial [Homo sapiens]	4.38	4.91	9	2	2	2	753	86.4	6.32
194374597	unnamed protein product [Homo sapiens]	4.37	4.10	14	2	2	2	439	48.5	5.92
578809883	PREDICTED: PDZ domain-containing protein 2 isoform X9 [Homo sapiens]	4.36	1.14	10	2	2	2	2542	269.5	7.85
194378486	unnamed protein product [Homo sapiens]	4.36	8.10	1	2	2	2	494	54.7	9.04
4091776	Sam68-like phosphotyrosine protein beta, partial [Homo sapiens]	4.36	7.58	18	2	2	2	264	29.3	9.58
62822526	unknown [Homo sapiens]	4.32	3.94	13	2	2	2	558	63.0	5.44
3970973	similar to human HsGCN1 U77700 (PID:g2282576); similar to yeast	4.31	1.30	10	2	2	2	2392	262.1	6.87
23396884	RecName: Full=Tropomodulin-3; AltName: Full=Ubiquitous tropomodulin [Homo sapiens]	4.27	5.40	4	2	2	2	352	39.6	5.19
119588404	hypothetical protein FLJ20294, isoform CRA_c [Homo sapiens]	4.27	3.23	11	2	2	2	1238	135.4	7.18
105553088	T-complex protein 10A homolog [Homo sapiens]	4.27	13.50	4	2	2	2	326	35.6	9.50
1008856	ribosomal protein L34 [Homo sapiens]	4.26	15.38	6	2	2	2	117	13.3	11.37
237649049	small nuclear ribonucleoprotein Sm D2 isoform 2 [Homo sapiens]	4.22	23.15	2	2	2	2	108	12.4	9.89
1911429	A0=heterogeneous nuclear ribonucleoprotein [human, placenta, Pe	4.20	9.18	2	2	2	2	305	30.9	9.29
578821411	PREDICTED: pecanex-like protein 3 isoform X6 [Homo sapiens]	4.19	1.80	8	2	2	2	1946	212.6	6.39
18032008	scribble [Homo sapiens]	4.19	1.60	10	2	2	2	1630	174.8	5.08
119603735	hCG18199, isoform CRA_a [Homo sapiens]	4.11	3.87	6	2	2	2	568	65.9	9.07
194377440	unnamed protein product [Homo sapiens]	4.10	3.98	13	2	2	2	603	68.5	7.94
62955831	small proline-rich protein 2B [Homo sapiens]	4.09	43.06	11	2	2	2	72	8.0	8.43
119601362	zinc finger, FYVE domain containing 26, isoform CRA_e [Homo sapiens]	4.08	1.73	13	2	2	2	2481	278.2	6.29
31874813	hypothetical protein [Homo sapiens]	4.08	2.40	4	2	2	2	1210	136.0	6.68
194374105	unnamed protein product [Homo sapiens]	4.06	9.56	9	2	2	2	366	40.6	5.27
578819622	PREDICTED: protein FAM178A isoform X2 [Homo sapiens]	4.04	2.44	10	2	2	2	1147	128.9	9.01
194382292	unnamed protein product [Homo sapiens]	3.86	19.61	8	2	2	2	153	16.8	5.29
16551892	unnamed protein product [Homo sapiens]	3.81	2.98	4	2	2	2	637	72.3	4.93
194373601	unnamed protein product [Homo sapiens]	3.74	13.14	12	2	2	2	137	16.0	11.09





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10434858	unnamed protein product [Homo sapiens]	34.29	19.35	6	1	1	13	155	17.1	6.37
189066668	unnamed protein product [Homo sapiens]	34.26	5.68	3	1	1	15	317	36.0	8.73
193787108	unnamed protein product [Homo sapiens]	31.81	21.12	1	1	6	12	251	28.6	4.72
27370697	SGOL2 protein, partial [Homo sapiens]	30.12	4.91	11	1	1	12	387	43.7	8.50
3309535	liprin-alpha3 [Homo sapiens]	29.58	8.13	7	1	2	13	443	49.4	8.97
119579661	hCG1748768, isoform CRA_b, partial [Homo sapiens]	26.65	10.67	13	1	4	11	450	50.6	7.52
194378760	unnamed protein product [Homo sapiens]	26.32	20.86	19	1	9	11	532	58.3	6.49
1297274	beta-tubulin [Homo sapiens]	24.19	18.44	21	1	7	9	450	50.5	4.97
10441386	TPM4-ALK fusion oncoprotein type 2 [Homo sapiens]	22.76	29.96	51	1	8	8	237	27.5	4.78
530415146	PREDICTED: ubiquitin-60S ribosomal protein L40 isoform X2 [Homo sapiens]	21.80	10.86	2	1	1	11	175	19.4	9.22
119622550	hCG2041657, partial [Homo sapiens]	21.66	9.52	5	1	1	12	63	7.5	10.39
116242606	RecName: Full=Kinesin-like protein KIF1C	19.76	1.63	3	1	1	9	1103	122.9	6.90
296439440	RecName: Full=Ankyrin repeat domain-containing protein 11; AltName: Full=Ankyrin repeat domain-containing protein 11	19.42	1.01	14	1	2	8	2663	297.7	7.11
578823928	PREDICTED: stabilin-2 isoform X1 [Homo sapiens]	19.32	0.98	5	1	1	7	2246	243.6	6.51
119629684	pericentrin (kendrin), isoform CRA_c [Homo sapiens]	18.71	2.17	32	1	5	9	3139	355.7	5.47
84201618	SR140 protein [Homo sapiens]	18.53	4.68	64	1	4	8	620	72.5	7.58
119606579	hCG21545, isoform CRA_b [Homo sapiens]	18.49	0.99	8	1	1	10	707	81.5	8.29
193785127	unnamed protein product [Homo sapiens]	18.41	4.23	12	1	1	8	449	49.7	6.86
119579872	hCG1805190, partial [Homo sapiens]	17.72	21.74	1	1	1	8	46	5.0	12.91
578827640	PREDICTED: kinesin-like protein KIF23 isoform X8 [Homo sapiens]	17.67	1.44	13	1	1	9	486	56.1	9.04
358439938	Chain D, Crystal Structure Of Vimentin (fragment 144-251) From Homo sapiens	17.59	39.50	1	1	6	6	119	14.3	5.07
285803112	Chain A, Nmr Solution Structure Of The Caskin Sh3 Domain	17.33	7.23	17	1	1	11	83	9.3	9.82
478885	FR-gamma' [Homo sapiens]	17.14	16.35	3	1	1	7	104	11.8	8.21
16266931	Musashi1 [Homo sapiens]	16.84	10.06	7	1	1	12	179	20.2	8.91
50949277	hypothetical protein [Homo sapiens]	16.73	9.01	11	1	2	7	344	39.7	6.68
62087794	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1 variant [Homo sapiens]	16.48	3.44	10	1	2	8	698	80.4	7.74
119597114	hCG40355, isoform CRA_a [Homo sapiens]	15.76	47.53	13	1	7	7	162	18.6	9.33
20147759	regulator of G protein signalling 9L [Homo sapiens]	15.70	5.79	20	1	4	8	674	76.8	9.47
117558503	KRT83 protein [Homo sapiens]	15.57	7.16	40	1	5	8	447	49.6	5.39
119627670	poly(A) binding protein, cytoplasmic 4 (inducible form), isoform CRA_b [Homo sapiens]	15.51	8.13	13	1	4	7	615	67.9	9.45
122937211	proteasome-associated protein ECM29 homolog [Homo sapiens]	15.47	1.24	8	1	2	7	2017	223.6	8.75
166007177	Chain T, Solution Structure Of Human Immunoglobulin M	15.08	7.46	167	1	3	5	523	56.7	8.41
119598029	tropomyosin 1 (alpha), isoform CRA_e [Homo sapiens]	15.07	19.18	51	1	5	5	245	28.4	4.77
30749678	Chain A, Tr Receptor Mutations Conferring Hormone Resistance And Impaired Signaling [Homo sapiens]	15.00	7.98	1	1	1	7	263	29.6	5.49
157830410	Chain A, Monocyte Chemoattractant Protein-3, Nmr, Minimized Average Structure [Homo sapiens]	14.95	21.05	5	1	1	7	76	8.9	9.69
119594669	ribosomal protein S6 kinase, 90kDa, polypeptide 4, isoform CRA_d [Homo sapiens]	14.83	3.16	1	1	1	9	253	28.4	8.27
525343614	replication factor C subunit 2 isoform 5 [Homo sapiens]	14.69	9.13	1	1	1	6	219	24.7	6.39
3913958	RecName: Full=Kinesin-like protein KIF3B; AltName: Full=HH0048; Name: KIF3B	14.59	3.75	3	1	2	6	747	85.1	7.69
119593166	interleukin-1 receptor-associated kinase 1, isoform CRA_a [Homo sapiens]	14.49	3.67	8	1	2	7	682	73.4	6.68



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29160170	unnamed protein product [Homo sapiens]	10.26	3.87	8	1	1	5	310	35.9	9.66
491668222	Chain A, Crystal Structure Of The Human Cdk15 Kinase Domain	10.19	6.25	6	1	1	4	304	35.2	6.99
212675179	anti-HIV-1 V3 immunoglobulin heavy chain [Homo sapiens]	10.16	8.33	1	1	1	5	132	14.2	6.28
119582734	RAD50 homolog (S. cerevisiae), isoform CRA_c [Homo sapiens]	10.11	2.47	6	1	4	6	1173	138.3	6.55
239782025	Chain D, Human Sahn-Like Domain Of Human Adenosylhomocysteir	10.08	3.22	9	1	1	4	435	48.4	7.46
530382430	PREDICTED: dystonin isoform X7 [Homo sapiens]	10.04	0.96	31	1	5	5	7723	875.9	5.26
119613590	guanine nucleotide binding protein-like 3 (nucleolar)-like, isoform C	10.00	2.71	25	1	2	5	516	58.0	7.05
84784317	alpha-1-antitrypsin MBrescia variant [Homo sapiens]	9.96	20.22	1	1	1	3	89	10.7	6.16
578828430	PREDICTED: apolipoporphins-like [Homo sapiens]	9.87	2.18	13	1	2	5	688	74.4	7.01
6599138	hypothetical protein [Homo sapiens]	9.80	2.92	75	1	4	5	1132	129.0	5.57
578803637	PREDICTED: xin actin-binding repeat-containing protein 2 isoform X	9.70	1.42	16	1	5	5	3308	375.0	6.39
40976034	unnamed protein product [Homo sapiens]	9.59	7.07	1	1	1	6	99	10.5	9.33
46621647	PHLDB2 protein, partial [Homo sapiens]	9.51	3.31	16	1	3	5	1118	125.8	7.50
553243	HSrel-1 (AA at 250), partial [Homo sapiens]	9.48	17.14	6	1	1	5	105	12.0	6.11
2072948	putative p150 [Homo sapiens]	9.46	2.82	42	1	4	5	1275	149.0	9.67
119623235	hCG2038876, partial [Homo sapiens]	9.39	23.08	1	1	1	4	91	10.3	9.19
194379628	unnamed protein product [Homo sapiens]	9.39	3.43	5	1	2	4	1138	124.7	7.37
119597764	hCG2045348, partial [Homo sapiens]	9.38	27.54	1	1	2	5	69	7.9	10.70
119585568	G protein-coupled receptor 62 [Homo sapiens]	9.28	2.45	2	1	1	4	368	37.6	10.98
10433076	unnamed protein product [Homo sapiens]	9.25	10.98	9	1	1	4	164	18.7	6.09
119621885	lipoygenase homology domains 1, isoform CRA_d [Homo sapiens]	9.21	2.63	104	1	2	5	457	52.5	5.47
38540973	CCDC73 protein [Homo sapiens]	9.18	14.88	2	1	3	4	383	45.5	5.49
1022786	putative neuroD homolog protein, partial [Homo sapiens]	9.13	25.00	7	1	1	4	52	5.7	8.56
119624835	leucine rich repeat containing 1, isoform CRA_b [Homo sapiens]	9.12	7.44	4	1	4	5	524	59.2	5.02
50897294	POTE ankyrin domain family member A isoform 1 [Homo sapiens]	9.09	3.10	2	1	1	4	452	51.2	6.62
7020699	unnamed protein product [Homo sapiens]	9.09	2.69	9	1	1	4	557	63.9	7.81
119605696	hCG1658583, isoform CRA_b, partial [Homo sapiens]	9.00	3.00	5	1	2	4	966	106.8	7.97
374074366	Chain A, Crystal Structure Of 14-3-3 Epsilon With Mlf1 Peptide	8.98	12.50	36	1	3	4	232	26.6	5.02
609412463	Chain D, Crystal Structure Of Human Lnhk2b-h2a.z-anp32e	8.87	14.83	61	1	3	3	209	22.5	10.23
578830293	PREDICTED: DNA polymerase subunit gamma-2, mitochondrial isofo	8.85	6.06	10	1	1	4	330	37.3	8.31
21669971	immunoglobulin heavy chain VHDJ region [Homo sapiens]	8.83	14.84	1	1	1	3	128	14.0	5.96
259121493	MHC class I antigen [Homo sapiens]	8.79	11.05	1	1	1	4	181	21.0	6.93
197725197	Chain B, Crystal Structure Of Il-23 In Complex With Neutralizing Fat	8.79	8.52	1	1	1	2	223	23.8	8.65
534286037	Chain G, Crystal Structure Of Human Nucleosome Core Particle Lack	8.79	28.23	40	1	3	3	124	13.6	10.84
194380910	unnamed protein product [Homo sapiens]	8.71	3.58	12	1	2	4	923	103.8	5.38
194383864	unnamed protein product [Homo sapiens]	8.69	10.06	9	1	2	2	338	37.2	6.05
34534815	unnamed protein product [Homo sapiens]	8.58	3.99	3	1	1	4	476	54.9	8.53
119630771	phospholipase C, beta 4, isoform CRA_c [Homo sapiens]	8.57	4.50	12	1	2	3	1022	117.1	7.08
194383918	unnamed protein product [Homo sapiens]	8.54	1.95	8	1	1	3	718	81.4	5.44



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3859998	unknown [Homo sapiens]	7.04	4.75	13	1	2	4	316	36.6	6.09
119572141	spen homolog, transcriptional regulator (Drosophila) [Homo sapiens]	6.99	0.96	70	1	4	4	3664	402.0	7.58
119586250	mirror-image polydactyly 1, isoform CRA_a [Homo sapiens]	6.88	8.25	8	1	4	4	424	49.7	6.37
38541875	BRDT protein, partial [Homo sapiens]	6.86	5.82	77	1	3	4	464	53.0	9.36
119578686	zinc finger and BTB domain containing 5 [Homo sapiens]	6.85	2.07	2	1	1	3	677	74.2	6.19
578827509	PREDICTED: E3 ubiquitin-protein ligase HERC2 isoform X5 [Homo sapiens]	6.84	1.31	10	1	3	3	4748	517.6	6.30
116283819	HIRA protein [Homo sapiens]	6.83	2.64	8	1	2	4	643	70.5	8.10
189096240	Chain A, Structure Of Map Kinase P38 In Complex With A 1-O-Tolyl- mucin [Homo sapiens]	6.81	14.37	27	1	3	3	348	39.7	6.47
563379	mucin [Homo sapiens]	6.80	21.67	1	1	1	3	60	6.4	8.21
578802575	PREDICTED: peroxidasin homolog isoform X2 [Homo sapiens]	6.80	2.38	5	1	2	3	1388	155.5	7.31
40042522	unnamed protein product [Homo sapiens]	6.77	21.80	8	1	2	3	133	15.2	9.38
119621322	hCG1990625, isoform CRA_b [Homo sapiens]	6.77	15.83	2	1	1	4	120	13.7	6.10
119574194	heterogeneous nuclear ribonucleoprotein H1 (H), isoform CRA_b [Homo sapiens]	6.73	8.40	13	1	2	2	393	43.7	6.95
119612193	vacuolar protein sorting 13B (yeast), isoform CRA_b [Homo sapiens]	6.70	0.64	6	1	1	3	2352	262.1	6.68
13540565	dendritic cell-specific transmembrane protein isoform 1 [Homo sapiens]	6.70	8.72	2	1	2	3	470	53.4	9.29
119574562	hCG2024326, isoform CRA_b [Homo sapiens]	6.61	3.30	9	1	2	3	880	94.3	8.29
119610501	arachidonate 12-lipoxygenase, 12R type [Homo sapiens]	6.59	4.42	1	1	2	3	701	80.3	7.64
6466068	ATP sulfurylase/APS kinase isoform SK2 [Homo sapiens]	6.55	7.92	8	1	1	3	265	30.1	8.24
62087652	proteasome 26S ATPase subunit 5 variant [Homo sapiens]	6.55	11.30	9	1	3	3	345	38.7	6.47
221044806	unnamed protein product [Homo sapiens]	6.54	6.00	11	1	1	3	200	22.7	7.21
119600012	dopamine receptor D3, isoform CRA_b, partial [Homo sapiens]	6.54	3.22	25	1	2	4	342	37.9	8.41
15559471	ATAD3A protein [Homo sapiens]	6.51	7.34	14	1	3	3	586	66.2	9.17
194384396	unnamed protein product [Homo sapiens]	6.51	2.54	6	1	1	3	433	46.3	8.97
117558519	Phosphoinositide-3-kinase, regulatory subunit 4 [Homo sapiens]	6.48	2.43	3	1	3	3	1358	153.1	7.23
119594722	CDC42 binding protein kinase gamma (DMPK-like), partial [Homo sapiens]	6.48	3.19	5	1	3	3	1503	166.9	6.30
119603341	hypothetical protein LOC92922 [Homo sapiens]	6.46	7.27	2	1	3	3	550	62.6	5.58
74762377	RecName: Full=Leucine-rich repeat and immunoglobulin-like domain	6.45	6.91	2	1	2	3	593	63.7	8.18
119582715	apical protein 2, isoform CRA_b [Homo sapiens]	6.44	2.48	4	1	1	3	847	90.2	6.15
119568993	hCG1640214, isoform CRA_b [Homo sapiens]	6.44	1.16	126	1	4	4	2583	288.7	7.83
1091688	heat shock protein	6.43	21.77	5	1	3	3	124	13.7	8.13
119568026	radial spokehead-like 2, isoform CRA_a [Homo sapiens]	6.43	7.76	26	1	3	3	464	52.7	5.92
33570004	immunoglobulin kappa chain variable region [Homo sapiens]	6.42	21.35	1	1	1	3	89	9.7	4.78
119590349	hCG1791982, isoform CRA_b [Homo sapiens]	6.39	10.53	2	1	1	3	190	21.4	8.09
221044466	unnamed protein product [Homo sapiens]	6.38	6.60	12	1	2	3	485	55.3	7.94
62420299	unknown [Homo sapiens]	6.37	5.76	4	1	3	3	538	61.4	8.51
172046176	RecName: Full=Protein FAM179A	6.37	3.83	5	1	3	3	1019	111.1	9.42
371447579	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	6.36	26.89	58	1	2	2	119	13.3	5.45
194373809	unnamed protein product [Homo sapiens]	6.33	6.75	3	1	3	3	563	64.4	9.50
530404104	PREDICTED: exonuclease 3'-5' domain-containing protein 2 isoform	6.30	10.93	8	1	2	3	366	42.3	8.69





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1438954	neuronal pentraxin 1 [Homo sapiens]	5.60	4.88	5	1	2	3	430	47.0	6.55
40044130	unnamed protein product [Homo sapiens]	5.56	32.20	3	1	1	2	59	6.3	8.16
13276699	hypothetical protein [Homo sapiens]	5.55	2.95	1	1	2	2	984	112.2	6.55
208436347	TCF7L2 isoform pFC8A_TCF7L2_D5_ex3-11,12,13a,14 [Homo sapiens]	5.55	6.12	4	1	1	2	490	53.8	9.42
118142839	TLL5 protein [Homo sapiens]	5.54	3.24	10	1	2	3	709	80.0	9.16
119621549	retinoblastoma binding protein 8, isoform CRA_b [Homo sapiens]	5.49	2.08	5	1	1	2	867	98.4	6.64
194386848	unnamed protein product [Homo sapiens]	5.48	4.07	9	1	1	2	565	63.0	6.77
10334526	WTAP protein [Homo sapiens]	5.48	5.67	7	1	2	2	388	43.4	5.19
8569618	Chain B, Crystal Structure Of The Moesin Ferm DomainTAIL DOMAI	5.47	6.46	17	1	2	2	294	34.4	8.87
119591210	phenylalanine-tRNA synthetase-like, beta subunit, isoform CRA_c [H	5.47	3.06	14	1	2	3	490	54.8	7.50
119619736	hCG2005374 [Homo sapiens]	5.46	48.48	1	1	1	2	66	7.1	8.25
530405878	PREDICTED: protein unc-13 homolog C isoform X2 [Homo sapiens]	5.45	1.05	5	1	3	3	2188	247.7	5.91
119630259	chromosome 21 open reading frame 62, isoform CRA_b, partial [Ho	5.42	11.97	2	1	1	2	234	26.3	7.78
485601450	Chain e, Structure Of The Human 60s Ribosomal Proteins	5.40	15.56	5	1	2	3	135	15.8	11.33
55507560	unknown [Homo sapiens]	5.39	5.80	16	1	2	2	362	40.2	7.88
7023538	unnamed protein product [Homo sapiens]	5.37	5.85	6	1	1	3	171	19.6	5.68
327478596	RecName: Full=Uncharacterized protein C6orf132	5.37	2.27	2	1	2	3	1188	124.0	9.45
266635280	truncated PRUNE2 [Homo sapiens]	5.36	0.99	25	1	3	3	2733	299.7	4.39
58331185	T-complex protein 1 subunit eta isoform b [Homo sapiens]	5.36	7.37	6	1	2	3	339	37.5	6.46
16552114	unnamed protein product [Homo sapiens]	5.36	6.08	1	1	2	2	707	81.4	6.16
530373337	PREDICTED: leucine-rich repeat flightless-interacting protein 2 isof	5.32	5.16	28	1	3	3	465	53.2	5.47
14423824	RecName: Full=Olfactory receptor 14J1; AltName: Full=Hs6M1-28; .	5.31	5.92	1	1	1	2	321	35.9	8.59
530380590	PREDICTED: prefoldin subunit 1 isoform X1 [Homo sapiens]	5.30	8.70	1	1	1	3	115	13.2	6.32
1195528	26S protease subunit S8=SUG1 homolog [human, erythrocytes, Pep	5.28	5.43	8	1	2	3	405	45.2	9.01
530432132	PREDICTED: B-cell CLL/lymphoma 9 protein isoform X3 [Homo sapi	5.28	2.44	5	1	1	3	1352	141.9	8.72
154091032	ankyrin repeat domain-containing protein 22 [Homo sapiens]	5.27	7.85	2	1	1	2	191	21.8	8.84
5174449	histone H1x [Homo sapiens]	5.27	7.04	1	1	1	2	213	22.5	10.76
63089484	unnamed protein product [Homo sapiens]	5.26	45.83	10	1	1	2	72	7.2	7.18
404248892	immunoglobulin gamma heavy chain variable region, partial [Homo	5.25	9.82	1	1	1	2	112	12.2	8.81
40041152	unnamed protein product [Homo sapiens]	5.25	10.38	10	1	1	2	106	12.1	6.52
197927452	dynein heavy chain 1, axonemal [Homo sapiens]	5.24	0.66	24	1	3	3	4265	487.2	5.83
194377758	unnamed protein product [Homo sapiens]	5.24	1.29	7	1	1	3	465	51.7	7.21
33150550	HUMEEP [Homo sapiens]	5.24	6.62	2	1	1	2	453	50.5	6.25
116283983	SMC5 protein [Homo sapiens]	5.22	3.61	9	1	2	2	941	109.9	8.63
371570899	immunoglobulin heavy variable 5-51*01, partial [Homo sapiens]	5.22	39.62	12	1	2	2	106	12.1	9.36
10437384	unnamed protein product [Homo sapiens]	5.22	3.59	17	1	2	3	696	81.6	5.33
119602645	nicotinate phosphoribosyltransferase domain containing 1, isoform C	5.21	2.74	1	1	1	2	584	62.1	6.73
119612624	DENN/MADD domain containing 3, isoform CRA_c [Homo sapiens]	5.21	3.97	12	1	1	2	554	63.5	8.51
40976100	unnamed protein product [Homo sapiens]	5.20	22.22	1	1	1	3	54	6.2	9.19





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194385986	unnamed protein product [Homo sapiens]	4.80	6.09	7	1	2	2	476	54.4	8.87
54400344	TPA_exp: tight junction protein occludin TM4 minus [Homo sapiens]	4.79	8.12	8	1	2	2	468	52.7	6.11
119628727	hCG1774880 [Homo sapiens]	4.78	0.31	71	1	2	3	3829	436.7	7.18
194390454	unnamed protein product [Homo sapiens]	4.78	2.17	35	1	2	3	554	61.4	5.99
194380728	unnamed protein product [Homo sapiens]	4.76	5.72	6	1	1	2	367	42.0	6.48
482014	Ig kappa chain - human	4.76	31.58	3	1	2	2	114	12.5	7.39
119601403	hCG21972, isoform CRA_a [Homo sapiens]	4.75	4.35	2	1	2	2	506	59.2	6.44
28175590	PASK protein, partial [Homo sapiens]	4.73	4.30	16	1	2	2	953	103.1	4.63
119595726	hCG2045320 [Homo sapiens]	4.73	7.79	1	1	1	3	77	9.1	9.04
158261227	unnamed protein product [Homo sapiens]	4.72	4.35	1	1	1	2	276	31.5	8.12
46253814	immunoglobulin heavy chain [Homo sapiens]	4.72	4.96	1	1	1	3	141	15.4	7.96
3088336	ribosomal protein S5 [Homo sapiens]	4.71	27.27	5	1	1	1	55	6.0	8.97
532598	Ig J-chain, partial [Homo sapiens]	4.70	17.52	3	1	2	2	137	15.6	4.73
134105213	Chain A, Crystal Structure Of Alix V Domain	4.70	5.46	18	1	2	2	348	38.8	5.29
211827073	HECTD3 protein [Homo sapiens]	4.70	16.43	6	1	2	2	213	24.3	4.87
158261441	unnamed protein product [Homo sapiens]	4.70	2.70	6	1	2	2	963	109.9	5.57
221041748	unnamed protein product [Homo sapiens]	4.69	8.66	2	1	1	3	127	13.8	5.24
119621476	tumor suppressing subtransferable candidate 1, isoform CRA_a [Homo sapiens]	4.69	5.68	4	1	2	2	387	43.6	5.06
119627767	mitochondrial ribosomal protein S15, isoform CRA_d [Homo sapiens]	4.69	10.00	4	1	1	2	100	11.8	10.78
19575325	unnamed protein product [Homo sapiens]	4.69	2.67	2	1	2	2	1013	114.2	7.39
119603084	hCG1642576, isoform CRA_a [Homo sapiens]	4.69	11.50	1	1	1	2	113	12.4	6.67
193785274	unnamed protein product [Homo sapiens]	4.68	6.97	7	1	2	2	330	37.7	5.40
156076916	immunoglobulin heavy chain variable region 6 [Homo sapiens]	4.68	17.82	2	1	1	2	101	11.4	8.91
119616473	calpastatin, isoform CRA_c [Homo sapiens]	4.68	4.69	49	1	2	2	683	73.0	5.64
221042518	unnamed protein product [Homo sapiens]	4.67	5.35	99	1	2	2	635	70.1	8.15
56967015	Chain A, Human Lamin Coil 2b	4.65	23.26	5	1	2	2	86	10.2	5.01
50949298	hypothetical protein [Homo sapiens]	4.65	4.01	11	1	2	2	873	99.0	6.29
614458217	FRAS1-related extracellular matrix protein 2 precursor [Homo sapiens]	4.64	1.45	2	1	2	2	3169	350.9	5.03
14040075	caspase recruitment domain protein 12 [Homo sapiens]	4.64	3.81	7	1	2	2	1024	116.1	6.77
194384194	unnamed protein product [Homo sapiens]	4.64	3.07	1	1	1	2	522	60.0	7.42
508123592	Chain C, Bace2 Fab Complex	4.63	15.38	6	1	2	2	221	23.6	8.90
40980772	unnamed protein product [Homo sapiens]	4.63	23.08	5	1	2	2	91	10.7	10.26
194374607	unnamed protein product [Homo sapiens]	4.63	4.35	1	1	1	2	207	24.3	4.60
119574016	hCG2003971, isoform CRA_a, partial [Homo sapiens]	4.59	10.53	1	1	1	2	95	11.1	9.50
371447767	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	4.59	17.21	1	1	1	2	122	13.3	8.46
530375745	PREDICTED: activated CDC42 kinase 1 isoform X5 [Homo sapiens]	4.59	1.83	3	1	1	2	1040	114.9	7.99
119570958	hCG1805634 [Homo sapiens]	4.59	15.63	1	1	2	2	96	11.0	4.84
119610899	Tax1 (human T-cell leukemia virus type 1) binding protein 3, isoform X1 [Homo sapiens]	4.59	38.30	1	1	1	2	47	5.5	10.87
307066	inosine-5'-monophosphate dehydrogenase (EC 1.1.1.205) [Homo sapiens]	4.58	6.61	6	1	2	2	514	55.9	7.08



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38014011	EHMT1 protein, partial [Homo sapiens]	4.31	2.09	20	1	1	2	716	78.9	5.77
119583281	hCG1813839 [Homo sapiens]	4.30	14.14	1	1	1	2	99	11.8	10.01
460417544	Chain B, Crystal Structure Of The Dh-ph-ph Domain Of Farp1	4.29	6.59	5	1	2	2	501	57.8	7.37
119619478	family with sequence similarity 47, member B [Homo sapiens]	4.29	4.81	3	1	2	2	645	73.9	8.73
34536022	unnamed protein product [Homo sapiens]	4.28	5.51	14	1	2	2	526	58.0	8.47
219841912	TACC2 protein [Homo sapiens]	4.28	1.34	24	1	2	2	2826	296.6	4.79
119591837	protein inhibitor of activated STAT, 3, isoform CRA_c [Homo sapiens]	4.28	5.73	3	1	2	2	628	68.0	7.69
106575	Ig kappa chain V region (Vx O11 and Vx O1) - human (fragment)	4.28	25.62	3	1	2	2	121	13.3	4.61
119610447	chromosome 17 open reading frame 38, isoform CRA_d [Homo sapiens]	4.27	6.65	7	1	2	2	376	42.0	9.20
21998598	immunoglobulin heavy chain variable region [Homo sapiens]	4.26	15.45	2	1	1	2	123	13.3	4.67
119570224	CWF19-like 1, cell cycle control (S. pombe), isoform CRA_b [Homo sapiens]	4.26	3.99	3	1	1	2	401	45.5	7.66
194375538	unnamed protein product [Homo sapiens]	4.25	7.29	36	1	2	2	288	30.0	9.67
40981668	unnamed protein product [Homo sapiens]	4.25	30.77	1	1	1	2	52	5.9	10.30
167745132	Chain A, Human Poly(Adp-Ribose) Polymerase 3, Catalytic Fragment	4.24	7.84	1	1	2	2	357	39.7	6.27
119571294	aldehyde dehydrogenase 3 family, member A1, isoform CRA_b [Homo sapiens]	4.24	6.18	20	1	2	2	453	50.3	6.54
119571005	hCG1994859 [Homo sapiens]	4.24	14.18	1	1	1	2	141	14.9	6.70
530386299	PREDICTED: PERQ amino acid-rich with GYF domain-containing protein	4.24	1.64	29	1	2	2	1034	114.4	5.39
21748512	FLJ00310 protein [Homo sapiens]	4.23	9.97	1	1	2	2	291	34.5	5.53
298286915	RecName: Full=Maestro heat-like repeat-containing protein family n	4.23	2.05	98	1	2	2	1706	193.1	6.68
126632187	RAPGEF6 protein [Homo sapiens]	4.23	2.26	19	1	2	2	1504	168.8	6.42
119609196	chromosome condensation-related SMC-associated protein 1, isoform CRA_a [Homo sapiens]	4.23	2.03	9	1	2	2	937	104.4	5.87
51094807	LOC401407 [Homo sapiens]	4.22	10.94	1	1	2	2	265	30.3	9.26
119609629	cerebellar degeneration-related protein 2-like, isoform CRA_a [Homo sapiens]	4.21	6.52	6	1	2	2	414	47.1	6.80
390979647	beta/gamma crystallin domain-containing protein 3 [Homo sapiens]	4.21	0.94	6	1	2	2	2970	330.4	5.20
159147879	Par6 beta short form [Homo sapiens]	4.20	17.39	3	1	1	2	115	13.0	9.35
221042054	unnamed protein product [Homo sapiens]	4.20	5.57	14	1	1	2	323	36.0	7.52
119573448	hCG1997332, isoform CRA_a [Homo sapiens]	4.19	6.28	2	1	1	2	207	22.0	5.43
530369556	PREDICTED: activin receptor type-2A isoform X1 [Homo sapiens]	4.19	9.14	4	1	2	2	361	40.5	6.81
119592618	ribosomal protein S9, isoform CRA_c [Homo sapiens]	4.19	10.79	16	1	2	2	139	16.6	11.06
133777825	PB1 protein [Homo sapiens]	4.18	1.24	31	1	2	2	1615	184.5	6.79
119598373	zinc finger protein 680, isoform CRA_b [Homo sapiens]	4.18	2.88	4	1	1	2	452	52.7	9.04
392583868	SRA stem-loop-interacting RNA-binding protein, mitochondrial isoform CRA_a [Homo sapiens]	4.17	15.22	5	1	1	2	92	10.3	10.23
112180685	C20orf132 protein [Homo sapiens]	4.17	3.56	12	1	2	2	956	108.1	8.07
547234890	PIN2/TERF1-interacting telomerase inhibitor 1 isoform 2 [Homo sapiens]	4.17	9.20	6	1	1	2	174	19.7	8.82
530386990	PREDICTED: WD repeat-containing protein 86 isoform X3 [Homo sapiens]	4.17	4.28	6	1	1	2	327	35.6	7.68
18676660	FLJ00229 protein [Homo sapiens]	4.16	1.91	1	1	1	2	627	71.5	8.62
371446725	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	4.16	16.10	1	1	1	2	118	12.4	9.41
119583441	WD repeat domain 7, isoform CRA_a, partial [Homo sapiens]	4.15	2.36	8	1	2	2	1398	153.8	6.79
312050	myosin I homologue [Homo sapiens]	4.15	2.96	23	1	2	2	812	96.0	9.39



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10436696	unnamed protein product [Homo sapiens]	3.90	3.60	7	1	2	2	639	71.8	8.72
4501959	alpha-1B adrenergic receptor [Homo sapiens]	3.88	2.88	7	1	2	2	520	56.8	9.41
578841606	PREDICTED: E3 ubiquitin-protein ligase TRIM31 isoform X3 [Homo sapiens]	3.88	6.90	68	1	2	2	261	30.0	6.99
40042310	unnamed protein product [Homo sapiens]	3.87	21.93	9	1	2	2	114	12.8	11.34
34811402	Chain B, Crystal Structure Of Human Cathepsin F	3.87	7.94	8	1	2	2	214	23.6	6.19
255917908	Chain C, Crystal Structure Of The Cbc-Importin Alpha Complex.	3.86	3.85	7	1	1	1	467	50.7	5.17
24899178	KIAA2006 protein [Homo sapiens]	3.86	1.83	22	1	2	2	1367	151.0	5.15
126030570	Chain A, Structural And Functional Insights Into The Human Upf1 Homolog	3.85	3.53	8	1	2	2	624	69.9	8.48
19578161	unnamed protein product [Homo sapiens]	3.84	2.64	8	1	2	2	682	78.0	8.68
450469	type 2 inositol 1,4,5-trisphosphate receptor [Homo sapiens]	3.83	0.85	13	1	2	2	2701	307.9	6.46
30269262	pol protein [Homo sapiens]	3.83	2.11	1	1	2	2	1183	131.4	9.04
51094479	similar to 60S ribosomal protein L35 [Homo sapiens]	3.82	15.15	16	1	2	2	99	11.5	10.96
143928063	RecName: Full=Serine/arginine repetitive matrix protein 2; AltName: Full=SRM2	3.81	1.13	80	1	2	2	2752	299.4	12.06
119620329	RAB1A, member RAS oncogene family, isoform CRA_f [Homo sapiens]	3.81	9.73	7	1	2	2	257	28.1	8.57
119596076	stauferin, RNA binding protein, homolog 1 (Drosophila), isoform CRA_a	3.80	3.79	31	1	2	2	317	35.4	9.89
257297088	unnamed protein product [Homo sapiens]	3.79	20.29	8	1	2	2	138	15.1	9.70
530360940	PREDICTED: OTU domain-containing protein 3 isoform X2 [Homo sapiens]	3.78	3.65	7	1	2	2	384	42.5	7.62
4884358	hypothetical protein [Homo sapiens]	3.78	4.18	18	1	2	2	502	55.4	9.63
374414629	Chain D, Crystal Structure Of Human Pnpase	3.77	2.54	9	1	2	2	630	68.7	6.58
74734680	RecName: Full=Uncharacterized protein C2orf42	3.77	3.31	5	1	2	2	574	64.0	8.92
755748	RB protein binding protein [Homo sapiens]	3.76	2.11	5	1	2	2	948	107.1	9.95
193785179	unnamed protein product [Homo sapiens]	3.76	2.65	9	1	2	2	491	55.0	9.06
119596753	hCG2019498, isoform CRA_b [Homo sapiens]	3.76	1.31	92	1	2	2	1068	120.9	8.95
119594879	testis specific, 10 interacting protein, partial [Homo sapiens]	3.75	3.60	6	1	2	2	556	62.3	10.05
119574994	discs, large homolog 5 (Drosophila), isoform CRA_a [Homo sapiens]	3.75	4.01	16	1	2	2	674	74.9	8.22
194386984	unnamed protein product [Homo sapiens]	3.75	2.92	62	1	2	2	753	83.2	7.20
429509414	MHC class I antigen, partial [Homo sapiens]	3.74	3.31	2	1	1	2	181	20.9	5.73
645986066	Chain D, Crystal Structure Of The Human Cdk12-cyclin Complex	3.74	1.84	11	1	1	2	326	37.7	6.93
119620760	MORN repeat containing 2, partial [Homo sapiens]	3.74	1.74	39	1	2	2	976	109.5	7.47
193788489	unnamed protein product [Homo sapiens]	3.73	4.37	17	1	2	2	504	56.6	9.19
164691209	unnamed protein product [Homo sapiens]	3.73	14.75	6	1	2	2	122	13.5	5.21
1729764	dynein-related protein [Homo sapiens]	3.72	2.63	1	1	2	2	798	91.0	5.69
1585676	acyl-CoA/cholesterol acyltransferase	3.71	2.91	7	1	2	2	550	64.8	9.07
10438885	unnamed protein product [Homo sapiens]	3.71	7.27	10	1	2	2	289	32.0	9.66
38196995	DUS1L protein, partial [Homo sapiens]	3.71	7.36	96	1	2	2	299	33.8	8.91
10437232	unnamed protein product [Homo sapiens]	3.71	10.70	11	1	2	2	215	24.5	5.14
119571060	coiled-coil domain containing 22, isoform CRA_b, partial [Homo sapiens]	3.70	1.32	4	1	1	2	606	68.6	7.08
469096	microsomal triglyceride transfer protein [Homo sapiens]	3.70	2.01	1	1	2	2	894	99.3	8.41
578808153	PREDICTED: myb/SANT-like DNA-binding domain-containing protein	3.69	4.15	3	1	1	2	265	30.5	8.57





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327478577	RecName: Full=Interferon-related developmental regulator 2; AltNa	3.34	1.19	2	1	1	2	506	54.8	7.94
71051976	MYH11 protein [Homo sapiens]	3.33	11.71	1	1	1	1	222	25.0	7.02
119569715	chromosome 10 open reading frame 86, isoform CRA_a, partial [Ho	3.33	2.85	4	1	1	2	316	35.8	5.76
609412241	Chain A, The Structure Of 1na In Complex With Src T338g	3.32	4.91	2	1	1	1	448	51.0	6.47
119631103	hCG2003116, isoform CRA_c [Homo sapiens]	3.31	1.87	13	1	2	2	643	74.0	8.32
158061661	unnamed protein product [Homo sapiens]	3.31	0.59	10	1	2	2	3069	334.8	5.99
221040986	unnamed protein product [Homo sapiens]	3.27	0.42	16	1	1	2	1415	163.5	6.21
13529083	ARG1 protein [Homo sapiens]	3.26	2.97	12	1	2	2	236	25.3	8.51
98956399	immunoglobulin kappa light chain variable region [Homo sapiens]	3.23	11.61	1	1	1	1	112	12.3	9.35
119570989	eukaryotic elongation factor-2 kinase [Homo sapiens]	3.22	1.10	3	1	1	2	725	82.1	5.36
158714178	C-type lectin family 2 member A variant 2 [Homo sapiens]	3.22	16.33	5	1	1	1	147	17.1	8.47
194376218	unnamed protein product [Homo sapiens]	3.22	13.23	1	1	1	1	189	22.2	5.24
114147509	immunoglobulin heavy chain variable region [Homo sapiens]	3.20	10.48	1	1	1	1	124	13.6	5.99
119608376	hCG30195, isoform CRA_c [Homo sapiens]	3.19	0.61	17	1	2	2	1955	214.1	7.72
180631	calnexin, partial [Homo sapiens]	3.19	4.21	5	1	1	1	356	40.8	4.34
485601395	Chain N, Structure Of The Human 40s Ribosomal Proteins	3.18	9.93	1	1	1	1	151	17.2	10.54
300116271	3-oxo-5-beta-steroid 4-dehydrogenase isoform 2 [Homo sapiens]	3.18	4.56	6	1	1	2	285	32.9	6.62
221040266	unnamed protein product [Homo sapiens]	3.17	11.86	18	1	1	1	118	13.5	8.60
320042386	immunoglobulin heavy chain variable region [Homo sapiens]	3.17	15.45	1	1	1	1	123	13.6	7.77
556695373	TBC1 domain family member 21 isoform 2 [Homo sapiens]	3.17	4.33	5	1	1	2	300	34.9	6.04
353558907	RecName: Full=Proline-rich basic protein 1	3.15	1.87	1	1	2	2	1015	106.9	9.63
428698207	Chain G, Dcnl Complex With N-terminally Acetylated Nedd8 E2 Pept	3.15	28.00	1	1	1	2	25	2.6	9.70
530388682	PREDICTED: collectin-10 isoform X1 [Homo sapiens]	3.14	3.85	4	1	1	2	208	23.3	7.66
387936154	glutaminyl-tRNA synthetase, partial [Homo sapiens]	3.14	25.93	9	1	1	1	108	11.5	9.99
119618933	splicing factor, arginine/serine-rich 8 (suppressor-of-white-apricot h	3.14	1.82	10	1	2	2	825	90.7	9.09
40039698	unnamed protein product [Homo sapiens]	3.13	12.73	1	1	1	2	55	5.6	12.00
119622426	aggrecan 1 (chondroitin sulfate proteoglycan 1, large aggregating p	3.13	1.62	7	1	1	1	2165	224.6	4.20
116496933	Zinc finger protein 37 homolog (mouse) [Homo sapiens]	3.13	2.06	15	1	2	2	630	71.2	9.06
34529199	unnamed protein product [Homo sapiens]	3.12	1.62	108	1	2	2	677	78.4	6.65
62988906	unknown [Homo sapiens]	3.12	0.56	14	1	2	2	2151	235.0	6.60
1942180	Chain H, Free And Liganded Form Of An Esterolytic Catalytic Antibo	3.11	8.76	2	1	1	1	217	23.2	8.66
119584509	vestigial like 4 (Drosophila), isoform CRA_f [Homo sapiens]	3.10	5.02	48	1	2	2	219	23.1	9.31
119596687	S-adenosylhomocysteine hydrolase, isoform CRA_b [Homo sapiens]	3.09	5.26	8	1	1	1	285	30.9	5.26
119568064	AT rich interactive domain 1B (SWI1-like), isoform CRA_b [Homo sa	3.09	1.89	8	1	1	2	529	51.9	7.71
264673	gp39=CD40 ligand [human, hyper-IgM syndrome patient CD, T cell	3.08	3.31	6	1	1	2	151	16.4	9.51
119623578	hCG1811792, isoform CRA_a [Homo sapiens]	3.07	17.17	2	1	1	1	99	11.0	9.50
304562566	immunoglobulin gamma 1 heavy chain variable region [Homo sapien	3.07	12.98	1	1	1	1	131	13.9	7.94
578814737	PREDICTED: diacylglycerol kinase iota isoform X3 [Homo sapiens]	3.06	2.82	9	1	1	1	496	55.6	6.11
537368169	immunoglobulin heavy chain variable region, partial [Homo sapiens]	3.06	11.96	1	1	1	1	92	10.5	6.55





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284174	Ig heavy chain V region (DP-1) - human (fragment)	2.84	11.22	9	1	1	1	98	10.9	9.13
119598316	hCG2036668, partial [Homo sapiens]	2.84	13.43	1	1	1	1	216	21.9	5.60
519674316	immunoglobulin A heavy chain variable region, partial [Homo sapiens]	2.84	23.58	1	1	1	1	123	13.1	7.94
40982484	unnamed protein product [Homo sapiens]	2.83	24.74	1	1	1	1	97	11.5	9.10
12620919	prosome P27K protein [Homo sapiens]	2.82	18.97	7	1	1	1	58	6.2	8.97
221044848	unnamed protein product [Homo sapiens]	2.82	3.45	3	1	1	2	579	63.1	7.85
530362593	PREDICTED: protein FAM73A isoform X5 [Homo sapiens]	2.81	4.55	6	1	1	1	593	66.5	5.55
61679988	Chain B, Crystal Structure Of The TollINTERLEUKIN-1 Receptor (Tir)	2.81	11.95	1	1	1	1	159	18.8	6.79
194381766	unnamed protein product [Homo sapiens]	2.81	11.52	4	1	1	1	165	19.2	9.77
221044944	unnamed protein product [Homo sapiens]	2.81	3.09	8	1	1	1	518	59.3	6.49
119607958	zinc finger protein 482 [Homo sapiens]	2.80	6.60	1	1	1	1	424	48.2	6.76
194390448	unnamed protein product [Homo sapiens]	2.79	8.21	3	1	1	1	280	32.2	9.20
119587014	ATPase, Class II, type 9B, isoform CRA_b, partial [Homo sapiens]	2.79	9.39	1	1	1	1	330	35.5	10.46
40041124	unnamed protein product [Homo sapiens]	2.79	11.36	8	1	1	1	132	14.1	6.92
40037956	unnamed protein product [Homo sapiens]	2.79	18.80	1	1	1	1	117	13.1	4.64
75765948	Chain C, Structure Of The Third Kh Domain Of Hnrnp K In Complex	2.79	18.29	1	1	1	1	82	8.9	8.50
189054432	unnamed protein product [Homo sapiens]	2.79	6.44	1	1	1	1	295	31.6	6.38
6599075	caveolin-1 [Homo sapiens]	2.78	21.54	5	1	1	1	65	7.4	5.78
304563754	immunoglobulin gamma 4 heavy chain variable region [Homo sapiens]	2.78	19.23	1	1	1	1	130	14.1	8.87
18676690	FLJ00244 protein [Homo sapiens]	2.78	2.49	9	1	1	1	1124	125.8	8.50
28193122	unnamed protein product [Homo sapiens]	2.78	8.14	6	1	1	1	221	25.5	6.52
148921621	FOXN4 protein [Homo sapiens]	2.78	4.84	1	1	1	1	517	55.2	6.48
4732139	smoothed [Homo sapiens]	2.76	30.00	3	1	1	1	80	8.6	5.24
62088078	DHX57 protein variant [Homo sapiens]	2.76	2.86	9	1	1	1	733	82.6	7.97
4960030	Rab GDP dissociation inhibitor beta [Homo sapiens]	2.76	4.18	6	1	1	1	359	41.0	7.88
119601895	solute carrier family 24 (sodium/potassium/calcium exchanger), member 1	2.76	3.16	11	1	1	1	316	35.2	6.57
40977724	unnamed protein product [Homo sapiens]	2.74	58.18	1	1	1	1	55	5.7	8.28
62630166	unknown [Homo sapiens]	2.74	6.59	4	1	1	1	425	46.9	4.75
6624942	hypothetical protein [Homo sapiens]	2.74	14.21	4	1	1	1	190	22.2	5.48
10433952	unnamed protein product [Homo sapiens]	2.74	4.00	3	1	1	1	525	59.3	5.01
41350956	C12orf51 protein [Homo sapiens]	2.73	3.90	11	1	1	1	564	62.9	6.65
119579508	hydroxysteroid dehydrogenase like 2, isoform CRA_a, partial [Homo sapiens]	2.73	5.64	6	1	1	1	319	34.8	7.36
578802666	PREDICTED: STAM-binding protein isoform X6 [Homo sapiens]	2.73	4.16	1	1	1	1	457	51.7	6.19
385271660	anti-group 1 influenza HA immunoglobulin heavy chain variable region	2.72	25.41	1	1	1	1	122	13.2	7.94
119625759	diacylglycerol O-acyltransferase 2-like 6 [Homo sapiens]	2.72	11.15	3	1	1	1	296	33.8	9.91
895845	p64 CLCP [Homo sapiens]	2.72	8.57	17	1	1	1	210	23.5	5.21
2914183	Chain B, Mature Oxy-Cope Catalytic Antibody With Hapten	2.72	8.60	1	1	1	1	221	23.6	8.38
365813387	Chain B, Crystal Structure Of A Raver1 Pri4 Peptide In Complex With	2.71	15.38	12	1	1	1	130	14.1	7.99
119583896	hCG1994156 [Homo sapiens]	2.71	22.06	1	1	1	1	68	7.9	10.68



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194318520	soluble IGF1R variant 2 [Homo sapiens]	2.64	3.56	10	1	1	1	759	85.8	6.81
119595343	phosphoglucomutase 2-like 1 [Homo sapiens]	2.64	3.22	4	1	1	1	622	70.4	7.15
448261618	low-density lipoprotein receptor class A domain-containing protein 1	2.64	19.75	1	1	1	1	162	17.7	5.15
119585176	hCG1777807 [Homo sapiens]	2.63	16.96	1	1	1	1	171	18.7	9.39
27900369	unnamed protein product [Homo sapiens]	2.63	17.61	5	1	1	1	142	16.1	8.87
119611557	nicotinamide nucleotide adenyltransferase 2, isoform CRA_d, parti	2.63	12.94	1	1	1	1	255	29.0	7.62
21336160	unnamed protein product [Homo sapiens]	2.63	1.66	1	1	1	1	1082	121.6	8.15
75765955	Chain A, Solution Structure Of The F-Actin Binding Domain Of Bcr- A	2.63	12.31	1	1	1	1	130	14.1	8.66
1685239	immunoglobulin variable region, partial [Homo sapiens]	2.63	19.67	1	1	1	1	122	13.7	8.37
159164174	Chain A, Solution Structure Of The First Ig-Like Domain Of Human C	2.63	21.54	4	1	1	1	130	14.0	6.54
299856865	Chain D, Crystal Structure Of EphA2 Ectodomain In Complex With E	2.63	13.77	6	1	1	1	138	16.3	7.71
6808044	hypothetical protein [Homo sapiens]	2.63	4.88	5	1	1	1	635	69.4	6.21
119613730	hCG2045588 [Homo sapiens]	2.63	54.90	1	1	1	1	51	6.2	10.01
40976616	unnamed protein product [Homo sapiens]	2.62	17.69	1	1	1	1	130	14.6	4.46
530383948	PREDICTED: DNA polymerase zeta catalytic subunit isoform X4 [Homo	2.62	0.78	8	1	1	1	2679	301.0	8.00
21670687	immunoglobulin heavy chain VHDJ region [Homo sapiens]	2.62	28.00	2	1	1	1	125	13.8	4.75
14336733	unknown [Homo sapiens]	2.62	14.23	1	1	1	1	246	25.5	7.90
2654488	dopamine transporter [Homo sapiens]	2.62	31.58	4	1	1	1	95	10.4	8.47
10437965	unnamed protein product [Homo sapiens]	2.62	8.57	3	1	1	1	210	23.6	7.61
578805875	PREDICTED: stabilin-1 isoform X5 [Homo sapiens]	2.62	1.51	14	1	1	1	1521	162.4	7.72
18027474	TRIMLESS beta [Homo sapiens]	2.61	9.68	3	1	1	1	279	32.0	6.73
7245821	Chain L, Unliganded Mature Oxy-Cope Catalytic Antibody	2.61	7.11	1	1	1	1	211	23.5	7.20
17942622	Chain B, The Unliganded Germline Precursor To The Sulfide Oxidase	2.61	4.11	1	1	1	1	219	23.4	8.63
119597329	ADAM metallopeptidase domain 22, isoform CRA_h, partial [Homo s	2.61	14.49	1	1	1	1	214	23.3	11.44
1388000	bradykinin receptor [Homo sapiens]	2.61	8.24	4	1	1	1	364	41.4	8.25
4324472	5c5-2 protein [Homo sapiens]	2.61	28.28	1	1	1	1	99	10.5	7.24
40976460	unnamed protein product [Homo sapiens]	2.60	68.63	1	1	1	1	51	5.6	8.60
21465965	Chain D, Structure Of The Human Replication Protein A (Rpa) Trime	2.60	17.36	2	1	1	1	121	13.6	5.08
119622789	hCG1778301 [Homo sapiens]	2.60	23.49	2	1	1	1	149	14.9	9.20
158259349	unnamed protein product [Homo sapiens]	2.60	2.90	5	1	1	1	828	94.0	9.07
155722998	sodium-driven chloride bicarbonate exchanger isoform 2 [Homo sap	2.60	2.57	5	1	1	1	1088	122.6	6.34
28447472	unnamed protein product [Homo sapiens]	2.60	3.62	3	1	1	1	387	42.8	8.46
25091738	RecName: Full=AN1-type zinc finger protein 5; AltName: Full=Zinc f	2.60	11.74	4	1	1	1	213	23.1	8.51
578836106	PREDICTED: retinoblastoma-like protein 1 isoform X1 [Homo sapien	2.60	3.24	5	1	1	1	896	101.1	7.56
7650413	immunoglobulin heavy chain variable region [Homo sapiens]	2.59	37.04	1	1	1	1	81	9.2	8.13
107558	R15 gamma peptide - human	2.59	43.24	1	1	1	1	37	4.5	4.53
10697072	immunoglobulin heavy chain variable region [Homo sapiens]	2.59	26.72	1	1	1	1	116	12.9	8.07
80975571	immunoglobulin heavy chain variable region VH [Homo sapiens]	2.59	24.37	1	1	1	1	119	12.7	5.96
119620238	hCG1812972 [Homo sapiens]	2.59	28.70	1	1	1	1	115	12.1	11.18



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320042358	immunoglobulin heavy chain variable region [Homo sapiens]	2.54	23.77	2	1	1	1	122	13.4	7.12
632933512	RNA-specific adenosine deaminase [Homo sapiens]	2.54	2.77	1	1	1	1	1226	135.9	8.56
119587019	ATPase, Class II, type 9B, isoform CRA_g [Homo sapiens]	2.54	11.42	19	1	1	1	254	28.2	5.44
163869660	immunoglobulin light chain variable region [Homo sapiens]	2.54	29.63	2	1	1	1	108	11.4	4.78
2145156	IgM rheumatoid factor RF-DI2, variable heavy chain [Homo sapiens]	2.54	24.17	1	1	1	1	120	13.2	7.94
119600648	ras homolog gene family, member T1, isoform CRA_a [Homo sapiens]	2.54	3.05	1	1	1	1	459	52.8	8.16
4337084	immunoglobulin lambda light chain variable region [Homo sapiens]	2.54	75.68	1	1	1	1	37	4.1	8.22
112702748	immunoglobulin heavy chain variable region [Homo sapiens]	2.54	23.76	1	1	1	1	101	10.8	7.87
28799745	unnamed protein product [Homo sapiens]	2.54	7.17	1	1	1	1	307	34.5	7.83
219517915	Neuropilin 2 [Homo sapiens]	2.54	3.24	1	1	1	1	926	104.1	5.17
57157119	G-protein coupled receptor [Homo sapiens]	2.54	2.95	1	1	1	1	542	60.0	6.28
119602114	likely ortholog of rat brain-enriched guanylate kinase-associated protein	2.54	5.10	6	1	1	1	529	56.9	5.33
119605709	DnaJ (Hsp40) homolog, subfamily A, member 3, isoform CRA_a, partial	2.53	5.11	9	1	1.1	1	450	49.3	9.29
119599423	calyntenin 2, isoform CRA_b [Homo sapiens]	2.53	6.41	5	1	1	1	608	67.8	6.52
58223096	anti-tetanus toxoid immunoglobulin light chain variable region [Homo sapiens]	2.53	27.78	1	1	1	1	108	11.6	8.50
62702328	unknown [Homo sapiens]	2.53	21.49	4	1	1	1	121	12.5	8.84
444733215	alternative protein TTYH2 [Homo sapiens]	2.53	38.60	1	1	1	2	57	6.1	11.41
84105516	C21orf123 protein [Homo sapiens]	2.53	9.42	1	1	1	1	138	15.0	9.83
49168450	ANXA9 [Homo sapiens]	2.53	9.17	2	1	1	1	338	37.6	5.76
532164692	vacuolar protein-sorting-associated protein 36 isoform 3 [Homo sapiens]	2.53	7.01	5	1	1	1	328	36.9	7.49
33570506	immunoglobulin kappa chain variable region [Homo sapiens]	2.53	23.96	1	1	1	1	96	10.7	5.06
109730461	Syntaxin binding protein 5 (tomosyn) [Homo sapiens]	2.53	2.69	1	1	1	1	1115	123.4	7.11
10444345	CIG30 [Homo sapiens]	2.53	12.71	2	1	1	1	236	27.3	9.79
4557501	cathepsin O preproprotein [Homo sapiens]	2.53	7.79	2	1	1	1	321	35.9	7.42
119595384	serpin peptidase inhibitor, clade H (heat shock protein 47), member 1	2.53	3.05	8	1	1	1	361	40.7	8.41
157829395	ubiquitously transcribed tetratricopeptide repeat protein Y-linked transmembrane	2.53	23.02	3	1	1	1	126	14.1	5.33
119589203	olfactory receptor, family 51, subfamily M, member 1 [Homo sapiens]	2.53	8.57	4	1	1	1	315	35.4	8.84
119577274	interleukin 28A (interferon, lambda 2) [Homo sapiens]	2.53	7.50	1	1	1	1	400	42.4	9.73
112696692	immunoglobulin heavy chain variable region [Homo sapiens]	2.53	21.78	1	1	1	1	101	10.9	8.97
578837112	PREDICTED: oxysterol-binding protein 2 isoform X9 [Homo sapiens]	2.52	4.34	1	1	1	1	461	52.5	7.21
388326835	Chain B, Crystal Structure Of The Two N-terminal Rrm Domains Of The	2.52	6.21	6	1	1	1	177	19.8	9.41
44894233	TCR alpha chain [Homo sapiens]	2.52	12.41	1	1	1	1	274	30.9	6.24
119588586	GPI-anchored membrane protein 1, isoform CRA_d [Homo sapiens]	2.52	2.87	6	1	1	1	628	70.3	5.02
41281429	basic leucine zipper and W2 domain-containing protein 1 isoform 4 [Homo sapiens]	2.52	7.65	6	1	1	1	353	40.5	6.46
119625999	UDP glucuronosyltransferase 2 family, polypeptide A1, isoform CRA_d	2.52	7.02	6	1	1	1	527	59.9	8.92
119617856	decorin, isoform CRA_a [Homo sapiens]	2.52	9.13	3	1	1	1	252	28.0	8.13
13487375	inwardly-rectifying potassium channel Kir1.2 [Homo sapiens]	2.52	79.41	6	1	1	1	34	3.9	10.95
119571227	hCG2043388 [Homo sapiens]	2.52	16.41	7	1	1	1	195	21.3	7.64
40032048	unnamed protein product [Homo sapiens]	2.52	9.64	1	1	1	1	197	21.6	11.12





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62988897	unknown [Homo sapiens]	2.36	2.53	7	1	1	1	711	79.0	8.10
39939605	immunoglobulin heavy chain variable region [Homo sapiens]	2.36	11.28	1	1	1	1	133	14.1	5.14
40040938	unnamed protein product [Homo sapiens]	2.36	5.88	13	1	1	1	170	19.1	6.54
119588867	hCG1992268 [Homo sapiens]	2.36	17.82	1	1	1	1	101	11.8	8.60
119582347	hCG1982215, isoform CRA_v [Homo sapiens]	2.35	1.71	2	1	1	1	817	89.7	4.73
187385	myristoylated alanine-rich C-kinase substrate, partial [Homo sapiens]	2.35	55.88	6	1	1	1	34	3.3	8.73
343478275	B9 domain-containing protein 1 isoform a [Homo sapiens]	2.35	6.61	1	1	1	1	257	27.8	10.99
399227406	sterile alpha motif domain containing 11 splice variant ASV11 [Homo sapiens]	2.34	1.78	1	1	1	1	619	65.6	8.46
485601410	Chain f, Structure Of The Human 40s Ribosomal Proteins	2.33	16.25	5	1	1	1	80	9.4	9.83
119583073	kinesin family member 27, isoform CRA_c [Homo sapiens]	2.33	3.34	10	1	1	1	389	45.5	7.14
14290586	TIMM50 protein [Homo sapiens]	2.33	3.49	6	1	1	1	344	38.8	8.37
119624289	hypothetical protein DKFZp779B1540 [Homo sapiens]	2.33	3.37	1	1	1	1	652	71.9	8.47
34533442	unnamed protein product [Homo sapiens]	2.32	3.04	1	1	1	1	493	55.3	9.45
193806376	RecName: Full=Tetratricopeptide repeat protein GNN; Short=TPR repeat [Homo sapiens]	2.32	0.83	1	1	1	1	1318	151.6	8.25
115305981	unnamed protein product [Homo sapiens]	2.31	13.73	12	1	1	1	153	16.5	7.75
223972627	3-oxoacyl-[acyl-carrier-protein] synthase, mitochondrial isoform 2 protein [Homo sapiens]	2.31	4.79	4	1	1	2	376	40.0	7.88
119583325	hCG2039004 [Homo sapiens]	2.30	10.00	2	1	1	1	140	15.1	8.34
259596	immunoglobulin VL region=humanized bispecific antibody [human, mouse]	2.30	7.48	3	1	1	1	107	11.9	8.44
578823589	PREDICTED: ras association domain-containing protein 3 isoform X1 [Homo sapiens]	2.30	7.02	2	1	1	1	228	26.3	7.78
114794318	Chain B, Acidic Residues At The Active Sites Of Cd38 And Adp-Ribosyltransferase [Homo sapiens]	2.29	7.63	2	1	1	1	262	30.2	6.62
40041958	unnamed protein product [Homo sapiens]	2.29	8.13	11	1	1	1	123	14.1	5.01
615276301	nephrocystin-4 isoform b [Homo sapiens]	2.29	2.41	10	1	1	1	913	100.9	8.16
50834176	unnamed protein product [Homo sapiens]	2.29	1.09	10	1	1	1	733	83.6	8.56
119589872	hCG1814070, partial [Homo sapiens]	2.28	16.06	1	1	1	1	137	15.1	11.94
119622336	hCG1796123 [Homo sapiens]	2.28	3.49	3	1	1	1	372	43.4	9.01
119628858	katanin p60 subunit A-like 1, isoform CRA_a [Homo sapiens]	2.27	2.65	3	1	1	1	490	55.4	6.74
119597419	hCG2042174, partial [Homo sapiens]	2.27	14.63	10	1	1	1	82	9.4	10.14
40039462	unnamed protein product [Homo sapiens]	2.27	10.20	11	1	1	1	147	16.4	3.95
530381706	PREDICTED: NAD-dependent protein deacetylase sirtuin-5, mitochondrial isoform 1 [Homo sapiens]	2.27	5.65	1	1	1	1	283	31.7	9.98
119611947	receptor interacting protein kinase 5, isoform CRA_b [Homo sapiens]	2.27	5.10	10	1	1	1	255	29.2	6.24
304562429	immunoglobulin gamma 2 heavy chain variable region [Homo sapiens]	2.27	11.36	1	1	1	1	132	14.4	8.62
38197069	PFKL protein, partial [Homo sapiens]	2.27	2.26	12	1	1	1	486	53.6	8.32
111494163	Mediator complex subunit 26 [Homo sapiens]	2.26	2.00	4	1	1	1	600	65.4	9.09
62420306	unknown [Homo sapiens]	2.26	1.55	8	1	1	1	1291	145.1	8.24
41472460	unknown [Homo sapiens]	2.26	2.76	11	1	1	1	326	35.8	7.88
21740345	hypothetical protein [Homo sapiens]	2.26	9.28	11	1	1	1	237	26.2	6.52
37781128	UEF3 [Homo sapiens]	2.26	5.42	6	1	1	1	406	46.8	8.75
40041454	unnamed protein product [Homo sapiens]	2.25	6.43	6	1	1	1	140	15.3	10.24
119625039	sorbin and SH3 domain containing 2, isoform CRA_d, partial [Homo sapiens]	2.25	22.37	1	1	1	1	76	8.3	7.25



40030410	unnamed protein product [Homo sapiens]	2.25	9.94	6	1	1	1	171	19.4	6.55
119610509	guanylate cyclase 2D, membrane (retina-specific) [Homo sapiens]	2.25	1.04	4	1	1	1	862	93.4	7.52
145911175	immunoglobulin heavy chain variable region [Homo sapiens]	2.25	18.48	1	1	1	1	92	10.3	6.64
194386918	unnamed protein product [Homo sapiens]	2.25	4.35	1	1	1	1	230	26.5	10.39
40046890	unnamed protein product [Homo sapiens]	2.25	6.88	1	1	1	1	160	18.5	8.35
119571225	hCG2042779 [Homo sapiens]	2.25	16.18	1	1	1	1	136	15.0	6.25
519673328	immunoglobulin A heavy chain variable region, partial [Homo sapiens]	2.24	13.01	1	1	1	1	123	13.8	8.85
119620409	AHA1, activator of heat shock 90kDa protein ATPase homolog 2 (yeast)	2.24	14.29	3	1	1	1	112	12.5	9.35
20150918	Chain A, Crystal Structure Of The N-Terminal Segment Of Human Erythrocyte Spectrin	2.24	6.04	3	1	1	1	182	21.2	7.34
18041762	immunoglobulin kappa light chain variable region [Homo sapiens]	2.24	17.39	2	1	1	1	92	10.1	8.47
33667089	ligand-dependent nuclear receptor corepressor-like protein isoform 1	2.24	6.60	2	1	1	1	318	35.4	5.10
296439575	RecName: Full=Uncharacterized protein C11orf95	2.23	1.62	1	1	1	1	678	73.2	6.16
119614073	hCG2009678 [Homo sapiens]	2.23	13.59	1	1	1	1	103	12.5	10.33
40981068	unnamed protein product [Homo sapiens]	2.23	22.22	1	1	1	1	72	8.1	5.29
390136348	Chain H, Structure Of Dengue Virus Diii In Complex With Fab 2h12	2.23	12.90	1	1	1	1	217	23.0	6.74
115430239	spectrin beta chain, non-erythrocytic 4 isoform sigma5 [Homo sapiens]	2.23	2.06	9	1	1	1	678	77.1	5.35
16549375	unnamed protein product [Homo sapiens]	2.23	7.14	1	1	1	1	168	18.9	12.31
119577179	hCG2041100, partial [Homo sapiens]	2.22	22.95	1	1	1	1	61	6.5	6.92
401015111	tumor necrosis factor receptor superfamily member 11A isoform 2 protein	2.22	5.70	10	1	1	1	263	28.9	8.24
39645003	AKR7A2 protein, partial [Homo sapiens]	2.22	4.19	3	1	1	1	358	39.4	7.17
348204	immunoglobulin light-chain V-J region, partial [Homo sapiens]	2.22	16.51	1	1	1	1	109	11.7	8.94
296179386	clathrin light chain A isoform e [Homo sapiens]	2.22	5.95	6	1	1	1	168	18.1	4.44
16554278	unnamed protein product [Homo sapiens]	2.22	4.85	7	1	1	1	206	24.0	8.81
2232013	zinc finger protein [Homo sapiens]	2.22	1.90	1	1	1	1	474	54.4	8.34
163931089	Chain B, Ap2 Clathrin Adaptor Core	2.22	3.55	15	1	1	1	591	66.8	5.31
40040316	unnamed protein product [Homo sapiens]	2.21	14.29	5	1	1	1	91	10.6	10.15
530427583	PREDICTED: protein FAM27D1-like [Homo sapiens]	2.21	7.59	1	1	1	1	237	26.5	11.11
211828173	VPS37D protein [Homo sapiens]	2.21	7.56	3	1	1	1	238	26.3	8.48
119609155	COP9 constitutive photomorphogenic homolog subunit 7A (Arabidopsis thaliana)	2.21	8.66	5	1	1	1	127	13.7	9.28
14549677	immunoglobulin heavy chain variable region, partial [Homo sapiens]	2.21	12.30	1	1	1	1	122	13.1	9.10
39938062	immunoglobulin heavy chain variable region [Homo sapiens]	2.21	10.74	1	1	1	1	149	16.2	8.95
21756038	unnamed protein product [Homo sapiens]	2.21	7.07	5	1	1	1	184	19.9	6.60
119623105	testis expressed sequence 13B [Homo sapiens]	2.20	6.41	1	1	1	1	312	33.9	6.18
74745319	RecName: Full=Keratinocyte proline-rich protein; Short=hKPRP	2.20	2.07	1	1	1	1	579	64.1	8.27
40039256	unnamed protein product [Homo sapiens]	2.20	14.58	3	1	1	1	96	9.5	9.25
119570637	hCG1818005, isoform CRA_b, partial [Homo sapiens]	2.20	17.72	2	1	1	1	79	8.8	5.39
530395950	PREDICTED: MAP kinase-activating death domain protein isoform X1	2.20	0.97	36	1	1	1	1231	136.1	6.10
119630989	nucleolar protein 5A (56kDa with KKE/D repeat), isoform CRA_a [Homo sapiens]	2.20	1.22	1	1	1	1	654	72.7	9.41
2258128	complement 9 [Homo sapiens]	2.20	3.94	4	1	1	1	533	60.4	5.59





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119622131	clusterin-like 1 (retinal), isoform CRA_c [Homo sapiens]	2.12	4.51	7	1	1	1	288	33.9	5.01
119593997	polymerase (RNA) I polypeptide B, 128kDa, isoform CRA_b [Homo sapiens]	2.12	1.33	10	1	1	1	824	93.5	7.44
259016156	RecName: Full=THO complex subunit 5 homolog; AltName: Full=Fu	2.12	2.20	6	1	1	1	683	78.5	6.87
442565693	otopettrin-3 isoform 2 [Homo sapiens]	2.12	2.08	5	1	1	1	578	64.4	7.97
40976374	unnamed protein product [Homo sapiens]	2.12	25.00	7	1	1	1	88	9.9	5.10
197692625	methyl-CpG binding domain protein 3-like [Homo sapiens]	2.12	5.67	2	1	1	1	194	21.5	7.94
896476	hormone-sensitive lipase [Homo sapiens]	2.12	2.97	10	1	1	1	775	84.1	6.71
28800915	unnamed protein product [Homo sapiens]	2.12	2.02	1	1	1	1	939	103.4	7.61
119609635	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit c	2.12	8.76	1	1	1	1	137	15.8	7.18
444738547	alternative protein SPRY1 [Homo sapiens]	2.12	25.00	1	1	1	1	52	5.7	9.47
221045258	unnamed protein product [Homo sapiens]	2.12	4.46	6	1	1	1	224	24.0	10.87
21757857	unnamed protein product [Homo sapiens]	2.12	7.49	5	1	1	1	334	37.8	9.03
119574444	ATP-binding cassette, sub-family B (MDR/TAP), member 8, isoform	2.12	11.05	12	1	1	1	190	20.7	6.89
189053760	unnamed protein product [Homo sapiens]	2.12	3.75	5	1	1	1	427	48.5	7.75
550029	methylmalonyl CoA mutase, MCM {EC 5.4.99.2} [human, mut- meth	2.11	5.47	2	1	1	1	274	29.6	6.55
315488052	immunoglobulin variable region [Homo sapiens]	2.11	11.81	1	1	1	1	127	13.8	5.33
408773052	truncated breast and ovarian cancer susceptibility protein 2, partial	2.11	52.00	1	1	1	1	25	3.0	4.72
578820330	PREDICTED: cyclic nucleotide-gated cation channel alpha-4 isoform	2.11	3.55	3	1	1	1	535	61.4	5.45
6114718	T cell receptor beta chain variable region [Homo sapiens]	2.11	16.90	1	1	1	1	71	7.6	7.34
440575999	alternative protein SETD1A [Homo sapiens]	2.11	4.41	1	1	1	1	340	39.1	12.23
6254142	chondromodulin-I [Homo sapiens]	2.11	12.50	5	1	1	1	120	13.7	7.91
15293621	olfactory receptor [Homo sapiens]	2.11	5.09	8	1	1	1	216	24.5	8.51
119601012	hCG2026668, partial [Homo sapiens]	2.10	24.53	1	1	1	1	53	6.3	5.97
358248275	Bardet-Biedl syndrome 4 protein isoform 2 [Homo sapiens]	2.10	6.05	12	1	1	1	347	38.3	6.87
24430155	26S protease regulatory subunit 6B isoform 2 [Homo sapiens]	2.10	5.43	4	1	1	1	387	43.5	5.26
578807499	PREDICTED: DNA-directed RNA polymerases I, II, and III subunit R	2.10	12.95	2	1	1	1	139	15.6	4.56
254575045	Chain A, Crystal Structure Of Human MocS3 Rhodanese-Like Domain	2.10	5.51	2	1	1	1	127	14.1	6.93
34535952	unnamed protein product [Homo sapiens]	2.10	7.69	1	1	1	1	143	16.0	9.57
40043704	unnamed protein product [Homo sapiens]	2.10	8.33	4	1	1	1	120	14.4	4.84
224808238	B cell antibody heavy chain variable region, partial [Homo sapiens]	2.10	16.80	1	1	1	1	125	13.6	9.20
119569966	hCG1781035, partial [Homo sapiens]	2.10	8.91	1	1	1	1	101	11.0	8.60
197304953	Chain B, Dj-1 Activation By Catechol Quinone Modification	2.10	8.02	24	1	1	1	187	19.6	7.33
530395980	PREDICTED: serine/threonine-protein kinase BRSK2 isoform X3 [Ho	2.09	3.53	8	1	1	1	453	49.5	9.33
119623752	general transcription factor IIH, polypeptide 4, 52kDa [Homo sapien	2.09	4.98	3	1	1	1	462	52.2	9.04
194387930	unnamed protein product [Homo sapiens]	2.09	4.46	5	1	1	1	314	36.8	8.79
194374039	unnamed protein product [Homo sapiens]	2.09	3.08	11	1	1	1	260	30.6	9.06
122892272	immunoglobulin heavy chain variable region [Homo sapiens]	2.09	13.95	1	1	1	1	129	14.3	7.96
10438861	unnamed protein product [Homo sapiens]	2.09	1.96	6	1	1	1	917	102.7	6.76
205689966	RecName: Full=Putative cathepsin L-like protein 6	2.09	6.86	2	1	1	1	277	30.9	6.15



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388778229	immunoglobulin heavy chain variable region, partial [Homo sapiens]	2.06	20.39	1	1	1	1	103	11.3	6.51
119623206	hCG18775, isoform CRA_b, partial [Homo sapiens]	2.06	3.85	1	1	1	1	441	51.0	6.74
194387728	unnamed protein product [Homo sapiens]	2.06	3.83	1	1	1	1	392	43.1	5.43
2654431	type XII collagen, partial [Homo sapiens]	2.06	3.87	6	1	1	1	517	56.7	5.03
239582759	equatorin isoform 2 precursor [Homo sapiens]	2.06	6.42	5	1	1	1	265	29.5	4.98
194381176	unnamed protein product [Homo sapiens]	2.06	1.69	3	1	1	1	415	45.0	6.14
40046834	unnamed protein product [Homo sapiens]	2.06	7.41	5	1	1	1	108	12.7	9.50
119604088	hypothetical protein DKFZp434G156, isoform CRA_b [Homo sapiens]	2.06	2.30	17	1	1	1	434	49.4	4.40
84798094	immunoglobulin light chain variable region EV3-4-LC-5 [Homo sapiens]	2.06	14.81	1	1	1	1	108	11.6	7.39
2340097	60% similarity to Z49912 (PID:g872093), match to Z41881 (NID:g5	2.06	5.43	8	1	1	1	184	21.2	9.45
530429173	PREDICTED: death domain-associated protein 6 isoform X3 [Homo sapiens]	2.06	4.57	1	1	1	1	372	40.1	4.32
229892345	zinc finger protein GLI1 isoform 2 [Homo sapiens]	2.06	1.94	6	1	1	1	978	104.6	7.12
68566217	RecName: Full=Protein tyrosine phosphatase type IVA 1; AltName:	2.06	8.67	1	1	1	1	173	19.8	8.97
194379382	unnamed protein product [Homo sapiens]	2.06	1.86	1	1	1	1	751	82.1	8.63
27753165	immunoglobulin heavy chain variable region [Homo sapiens]	2.06	7.25	1	1	1	1	138	14.9	8.62
62630195	unknown [Homo sapiens]	2.05	8.44	2	1	1	1	154	16.5	5.24
21757047	unnamed protein product [Homo sapiens]	2.05	13.39	2	1	1	1	127	13.6	8.54
51094855	family with sequence similarity 40, member B [Homo sapiens]	2.05	2.24	1	1	1	1	893	101.7	6.04
40043190	unnamed protein product [Homo sapiens]	2.05	8.24	11	1	1	1	85	8.8	10.80
119629117	hCG2020499, partial [Homo sapiens]	2.05	14.89	1	1	1	1	94	10.2	9.88
194378580	unnamed protein product [Homo sapiens]	2.05	3.46	5	1	1	1	376	42.6	5.45
182676484	RecName: Full=Putative proline dehydrogenase-like protein	2.05	9.68	18	1	1	1	186	21.1	8.12
530391245	PREDICTED: SHC-transforming protein 3 isoform X1 [Homo sapiens]	2.05	3.35	1	1	1	1	448	49.5	7.77
578817848	PREDICTED: transducin-like enhancer protein 4 isoform X18 [Homo sapiens]	2.05	1.83	6	1	1	1	764	83.2	7.61
22095217	immunoglobulin light chain variable region [Homo sapiens]	2.05	10.83	2	1	1	1	120	12.4	7.24
530379851	PREDICTED: AF4/FMR2 family member 4 isoform X2 [Homo sapiens]	2.05	1.78	5	1	1	1	785	85.8	9.16
221316716	proteasome subunit alpha type-1 isoform 3 [Homo sapiens]	2.05	11.54	6	1	1	1	130	14.6	8.51
221042434	unnamed protein product [Homo sapiens]	2.05	2.36	17	1	1	1	381	42.4	7.68
119578216	hCG1775001, isoform CRA_a [Homo sapiens]	2.05	1.12	7	1	1	1	717	79.7	6.64
4321151	formiminotransferase cyclodeaminase [Homo sapiens]	2.04	6.85	8	1	1	1	146	16.1	5.35
14424095	RecName: Full=NUAK family SNF1-like kinase 1; AltName: Full=AMF	2.04	1.82	2	1	1	1	661	74.3	8.82
119591549	hCG1777462, isoform CRA_a [Homo sapiens]	2.04	5.11	1	1	1	1	137	14.6	8.76
119619642	hCG1731070, partial [Homo sapiens]	2.04	16.04	1	1	1	1	106	12.0	5.78
40044514	unnamed protein product [Homo sapiens]	2.04	17.65	3	1	1	1	51	6.1	10.42
325053894	Chain H, Egfr Kinase Domain Complexed With An Imidazo[2,1-B]thiazole	2.04	5.20	5	1	1	1	327	37.0	8.19
40040960	unnamed protein product [Homo sapiens]	2.04	17.35	4	1	1	1	98	11.0	9.51
194386284	unnamed protein product [Homo sapiens]	2.04	8.16	31	1	1	1	196	21.1	9.58
194381152	unnamed protein product [Homo sapiens]	2.04	3.15	2	1	1	1	572	64.8	9.10
119602022	T-cell leukemia/lymphoma 6, isoform CRA_b [Homo sapiens]	2.04	9.22	1	1	1	1	141	15.8	9.23





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578800821	PREDICTED: digestive organ expansion factor homolog isoform X1 [	2.02	2.11	1	1	1	1	568	64.9	5.16
354686630	immunoglobulin heavy chain variable region [Homo sapiens]	2.02	12.82	1	1	1	1	78	9.0	9.14
371927701	Chain D, Crystal Structure Of Apo Human Ck1d	2.02	5.07	20	1	1	1	296	34.3	9.29
33356967	Chain B, Crystal Structure Of Human Angiogenin In Complex With F	2.02	8.52	1	1	1	1	223	23.6	8.05
119588589	hCG1785179 [Homo sapiens]	2.02	18.85	1	1	1	1	122	13.7	10.27
564731264	Chain B, Crystal Structure Of The Extracellular Domain Of Human G	2.02	1.85	11	1	1	1	433	49.0	7.12
530384843	PREDICTED: WD repeat-containing protein mio isoform X5 [Homo s	2.02	2.07	6	1	1	1	484	55.1	6.54
221040592	unnamed protein product [Homo sapiens]	2.02	2.91	4	1	1	1	619	68.7	8.72
119614192	insulin-like growth factor 2 mRNA binding protein 3, isoform CRA_a	2.02	3.32	13	1	1	1	422	46.1	9.48
21756595	unnamed protein product [Homo sapiens]	2.02	8.18	1	1	1	1	269	29.5	11.55
530403617	PREDICTED: DNA-(apurinic or apyrimidinic site) lyase isoform X2 [H	2.02	2.66	1	1	1	1	301	33.8	7.91
194379564	unnamed protein product [Homo sapiens]	2.02	8.24	8	1	1	1	255	26.3	9.51
209572622	RecName: Full=cTAGE family member 2; Short=Protein cTAGE-2; A	2.02	2.68	4	1	1	1	745	85.2	6.16
14017817	KIAA1800 protein [Homo sapiens]	2.01	3.13	1	1	1	1	736	84.2	7.30
119597580	hCG1983020, isoform CRA_e [Homo sapiens]	2.01	2.52	3	1	1	1	515	60.1	8.65
59807731	TDRD5 protein, partial [Homo sapiens]	2.01	2.03	4	1	1	1	787	88.0	7.37
1362826	Ig heavy chain V-J region - human (fragment)	2.01	6.09	1	1	1	1	115	12.7	9.17
2960071	acyl-CoA synthetase-like protein [Homo sapiens]	2.01	12.96	3	1	1	1	54	6.2	10.42
221042490	unnamed protein product [Homo sapiens]	2.01	1.97	5	1	1	1	557	61.4	5.11
5689744	T-box transcription factor [Homo sapiens]	2.01	6.50	6	1	1	1	200	23.1	9.31
91979430	immunoglobulin heavy chain variable region [Homo sapiens]	2.01	23.08	2	1	1	1	91	10.1	9.16
194387332	unnamed protein product [Homo sapiens]	2.01	2.47	1	1	1	1	324	37.1	11.71
341838320	MHC class I antigen [Homo sapiens]	2.01	11.05	1	1	1	1	181	20.9	6.89
119574473	hepatocellular carcinoma-associated antigen 112, isoform CRA_a [H	2.01	5.12	4	1	1	1	215	23.5	6.99
221043214	unnamed protein product [Homo sapiens]	2.01	2.35	6	1	1	1	638	72.1	8.97
532138042	Chain B, Structure Of C-terminal Coiled Coil Of Rasgrp1	2.01	26.79	11	1	1	1	56	6.6	6.52
119599724	hCG2045407, partial [Homo sapiens]	2.01	20.97	1	1	1	1	62	6.9	5.94
530416023	PREDICTED: zinc finger protein 30 homolog isoform X7 [Homo sapi	2.01	3.09	5	1	1	1	518	61.4	8.91
525458843	cytochrome P450 3A43 isoform 4 [Homo sapiens]	2.01	2.54	5	1	1	1	393	44.8	9.13
119620519	hypothetical protein FLJ31438, isoform CRA_c [Homo sapiens]	2.01	18.25	14	1	1	1	137	15.5	4.49
51094740	LOC392659 [Homo sapiens]	2.01	14.44	1	1	1	1	90	9.2	8.65
578814590	PREDICTED: zinc finger and SCAN domain-containing protein 21 iso	2.01	2.33	3	1	1	1	386	42.8	7.28
288965868	Chain B, Ligand Binding Domain Of Metabotropoc Glutamate Recept	2.01	1.83	10	1	1	1	492	55.3	6.43
887360	ORF; putative, partial [Homo sapiens]	2.00	7.33	1	1	1	1	273	30.8	5.06
37728216	immunoglobulin heavy chain variable region [Homo sapiens]	2.00	16.38	1	1	1	1	116	12.9	7.96
34201	unnamed protein product [Homo sapiens]	2.00	12.73	5	1	1	1	110	12.5	10.90
10436952	unnamed protein product [Homo sapiens]	2.00	3.75	5	1	1	1	267	31.1	7.05
4827036	peptidoglycan recognition protein 1 precursor [Homo sapiens]	2.00	7.14	1	1	1	1	196	21.7	8.59
159164066	Chain A, Solution Structure Of Rsgi Ruh-051, A C1 Domain Of Stac3	2.00	24.32	3	1	1	1	74	8.3	9.11





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91979682	immunoglobulin heavy chain variable region [Homo sapiens]	1.63	10.87	1	1	1	1	92	10.4	9.33
119597552	hCG1806822 [Homo sapiens]	1.63	1.55	1	1	1	1	1032	95.1	10.86
119611340	chromosome 1 open reading frame 9, isoform CRA_d [Homo sapiens]	1.61	0.57	5	1	1	1	1405	156.3	5.41
578826089	PREDICTED: tumor necrosis factor alpha-induced protein 2 isoform	1.61	1.12	1	1	1	1	716	79.7	8.28
119610596	transmembrane protein 102, isoform CRA_a [Homo sapiens]	1.61	1.57	1	1	1	1	508	54.1	5.91
119603716	hCG2044641, partial [Homo sapiens]	1.61	17.39	3	1	1	1	46	5.0	7.44
119632275	hCG1793821, isoform CRA_a [Homo sapiens]	1.61	7.48	1	1	1	1	107	12.1	5.49
6102931	hypothetical protein [Homo sapiens]	1.60	2.67	11	1	1	1	262	29.9	6.32
221043670	unnamed protein product [Homo sapiens]	1.60	6.45	1	1	1	1	155	16.1	6.13
1517907	RAGE-3 ORF5; one of 3 possible coding regions [Homo sapiens]	1.60	8.22	7	1	1	1	73	7.9	10.77
157874535	Chain A, Nmr Structure Of The Alpha-Helical Hairpin Of P8mtcp1	1.60	18.42	1	1	1	1	38	4.2	8.19
119607043	hCG1644292 [Homo sapiens]	1.59	1.41	1	1	1	1	709	78.1	6.90
119594952	actinin, alpha 3 [Homo sapiens]	1.59	1.22	5	1	1	1	576	66.4	5.80
11640574	MSTP033 [Homo sapiens]	1.59	13.33	1	1	1	1	60	7.0	10.45
28071038	unnamed protein product [Homo sapiens]	1.59	20.93	1	1	1	1	43	5.2	11.05
255918079	versican core protein isoform 4 precursor [Homo sapiens]	1.58	0.61	3	1	1	1	1642	181.9	4.89
20521005	KIAA0342 protein [Homo sapiens]	1.58	0.32	4	1	1	1	2467	283.5	6.48
371446332	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	1.58	3.97	2	1	1	1	126	13.8	7.05
40042660	unnamed protein product [Homo sapiens]	1.58	11.27	11	1	1	1	71	8.1	8.02
7023067	unnamed protein product [Homo sapiens]	1.58	1.41	24	1	1	1	354	39.9	4.97
119570164	hCG2044982 [Homo sapiens]	1.58	4.92	1	1	1	1	122	13.4	10.81
553281	erythropoietin receptor, partial [Homo sapiens]	1.58	7.29	11	1	1	1	96	10.5	4.61
119615334	chromosome 1 open reading frame 166, isoform CRA_b, partial [Homo sapiens]	1.57	1.50	1	1	1	1	400	41.6	11.36
34327986	KIAA1894 protein [Homo sapiens]	1.57	0.24	10	1	1	1	2977	325.4	5.82
119619594	TBC1 domain family, member 2B, isoform CRA_a [Homo sapiens]	1.57	1.92	10	1	1	1	312	36.4	5.86
16548917	unnamed protein product [Homo sapiens]	1.57	4.41	7	1	1	1	136	15.0	6.70
119628585	solute carrier family 12 (potassium/chloride transporters), member 12 [Homo sapiens]	1.56	1.00	21	1	1	1	501	57.5	9.16
930044	unnamed protein product [Homo sapiens]	1.56	9.09	2	1	1	1	77	8.2	10.01
119613734	hCG1985681 [Homo sapiens]	1.56	7.69	1	1	1	1	130	14.6	8.75
247426073	immunoglobulin heavy chain variable region [Homo sapiens]	1.56	5.51	2	1	1	1	127	13.9	6.62
194390218	unnamed protein product [Homo sapiens]	1.56	2.05	3	1	1	1	293	32.4	6.62
4009513	protoporphyrinogen oxidase mutant [Homo sapiens]	1.55	25.00	13	1	1	1	32	3.3	6.32
124504629	EGFR protein [Homo sapiens]	1.55	1.80	1	1	1	1	388	42.1	7.49
119615739	LIM and senescent cell antigen-like domains 2, isoform CRA_b, partial [Homo sapiens]	1.55	3.25	17	1	1	1	154	16.2	10.04
21752253	unnamed protein product [Homo sapiens]	1.55	2.07	6	1	1	1	484	57.6	8.50
578824856	PREDICTED: serine/threonine-protein kinase Nek5 isoform X3 [Homo sapiens]	1.55	1.49	4	1	1	1	402	46.0	9.55
119593870	hCG1987469, isoform CRA_a, partial [Homo sapiens]	1.54	1.91	1	1	1	1	314	33.4	9.36
119589078	olfactory receptor, family 2, subfamily D, member 3 [Homo sapiens]	1.54	1.91	13	1	1	1	314	35.7	8.97
119621301	DEAD (Asp-Glu-Ala-Asp) box polypeptide 1, isoform CRA_c [Homo sapiens]	1.54	1.86	8	1	1	1	377	41.5	7.17



Accession	Description	Score	Coverage
6166599	RecName: Full=Myosin-9; AltName: Full=Cellular myosin heavy chain	182.70	34.34
181402	epidermal cytokeratin 2 [Homo sapiens]	246.67	55.50
41322916	plectin isoform 1 [Homo sapiens]	66.29	7.28
123648	RecName: Full=Heat shock cognate 71 kDa protein; AltName: Full=	101.10	40.40
239938886	RecName: Full=Keratin, type I cytoskeletal 9; AltName: Full=Cytoke	193.59	56.18
74735628	RecName: Full=Sequestosome-1; AltName: Full=EBI3-associated pr	225.01	72.27
63087903	unnamed protein product [Homo sapiens]	3229.72	65.37
194388850	unnamed protein product [Homo sapiens]	89.05	43.51
113950	RecName: Full=Annexin A2; AltName: Full=Annexin II; AltName: Fu	38.83	37.46
119631419	titin, isoform CRA_a [Homo sapiens]	64.95	0.74
225733965	Chain L, Human Thrombopoietin Neutralizing Antibody Tn1 Fab	344.40	52.11
119581085	keratin 10 (epidermolytic hyperkeratosis; keratosis palmaris et plant	312.72	58.33
189306	nucleolin [Homo sapiens]	37.38	19.24
425518	anti-colorectal carcinoma heavy chain [Homo sapiens]	737.73	44.98
578837003	PREDICTED: histone acetyltransferase p300 isoform X1 [Homo sapi	31.12	7.58
146345444	RecName: Full=Kelch-like ECH-associated protein 1; AltName: Full=	42.33	23.24
119614804	clathrin, heavy polypeptide (Hc), isoform CRA_d [Homo sapiens]	30.03	8.54
169404698	Chain D, Pyruvate Kinase M2 Is A Phosphotyrosine Binding Protein	31.73	24.13
189502784	mitochondrial heat shock 60kD protein 1 variant 1 [Homo sapiens]	25.23	19.16
221042022	unnamed protein product [Homo sapiens]	28.03	19.70
119608213	spectrin, alpha, non-erythrocytic 1 (alpha-fodrin), isoform CRA_c [H	24.00	4.90
1195531	type I keratin 16 [Homo sapiens]	99.01	47.99
2769254	NIPSNAP2 protein [Homo sapiens]	35.16	38.25
378404908	glyceraldehyde-3-phosphate dehydrogenase isoform 2 [Homo sapien	32.83	40.61
119578453	alpha tubulin, isoform CRA_b [Homo sapiens]	22.51	25.48
194382178	unnamed protein product [Homo sapiens]	29.11	17.74
23491735	ribosomal protein L10a [Homo sapiens]	23.33	37.33
239938658	RecName: Full=Protein kinase C iota type; AltName: Full=Atypical p	26.45	15.27
15341992	Unknown (protein for IMAGE:4347401), partial [Homo sapiens]	15.32	26.86
516764	motor protein [Homo sapiens]	20.29	13.18
190192192	filamin B [Homo sapiens]	18.51	3.92
568786378	Chain A, Structure Of The Mammalian Ribosomal Pre-termination Cc	13.48	16.67
485601393	Chain S, Structure Of The Human 40s Ribosomal Proteins	14.18	31.58
190192184	filamin A [Homo sapiens]	15.02	3.15
221045062	unnamed protein product [Homo sapiens]	18.61	50.00
300669711	RecName: Full=Fibrous sheath-interacting protein 2	20.16	1.22
119602167	dynein, cytoplasmic 1, heavy chain 1, isoform CRA_c [Homo sapiens	17.64	2.31
119598181	ribosomal protein L4, isoform CRA_a [Homo sapiens]	23.10	21.92
14042692	unnamed protein product [Homo sapiens]	15.82	13.18
337580	ribosomal protein L3, partial [Homo sapiens]	15.07	13.07
39644662	HSP90AB1 protein [Homo sapiens]	43.69	26.62
34392	unnamed protein product [Homo sapiens]	13.12	27.15
119582734	RAD50 homolog (S. cerevisiae), isoform CRA_c [Homo sapiens]	13.33	3.50
31108	human elongation factor 2 [Homo sapiens]	12.27	7.34
194379998	unnamed protein product [Homo sapiens]	26.88	24.43
1827593	Chain B, Recombinant Cyclophilin A From Human T Cell	15.20	32.93
119577296	ribosomal protein S16, isoform CRA_a [Homo sapiens]	12.07	34.88
119612227	poly(A) binding protein, cytoplasmic 1, isoform CRA_c [Homo sapier	20.57	17.42
119601423	hCG2028724 [Homo sapiens]	17.91	25.94
119594430	eukaryotic translation elongation factor 1 gamma, isoform CRA_b [H	10.34	14.91
119582155	hCG1783090 [Homo sapiens]	13.78	18.55
340219	vimentin [Homo sapiens]	23.77	17.38
56675570	unnamed protein product [Homo sapiens]	18.18	24.31
825671	B23 nucleophosmin (280 AA) [Homo sapiens]	20.52	28.57
32488	unnamed protein product [Homo sapiens]	38.69	20.49
530420475	PREDICTED: protein NipSnap homolog 1 isoform X1 [Homo sapiens]	18.27	20.77
40031212	unnamed protein product [Homo sapiens]	14.54	35.61
403234036	eukaryotic translation initiation factor 3 [Homo sapiens]	15.71	5.28

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2	31873360	hypothetical protein [Homo sapiens]	11.03	5.23
3	160332335	RecName: Full=Neuroblast differentiation-associated protein AHNAK	17.65	6.59
4	58530842	desmoplakin isoform II [Homo sapiens]	10.05	2.90
5	485601397	Chain R, Structure Of The Human 40s Ribosomal Proteins	17.31	48.89
6	119615022	leucine rich repeat containing 59, isoform CRA_a [Homo sapiens]	13.88	16.61
7	49257460	PTRF protein [Homo sapiens]	11.04	19.33
8	21620099	Treacher Collins-Franceschetti syndrome 1 [Homo sapiens]	9.60	4.07
9	48735185	EEF1A1 protein [Homo sapiens]	59.05	41.50
10	375151597	60S ribosomal protein L10 isoform c [Homo sapiens]	8.84	23.03
11	15431310	keratin, type I cytoskeletal 14 [Homo sapiens]	75.69	31.78
12	157829895	Chain A, Crystal Structure Of Human Annexin I At 2.5 Angstroms Re	15.21	19.75
13	119621461	ribosomal protein S7, isoform CRA_a [Homo sapiens]	10.88	27.06
14	119631904	nebulin, isoform CRA_a [Homo sapiens]	12.94	1.36
15	119626065	albumin, isoform CRA_b [Homo sapiens]	24.04	10.23
16	119602460	ribosomal protein L8, isoform CRA_f [Homo sapiens]	13.70	23.18
17	119569562	antigen identified by monoclonal antibody Ki-67, isoform CRA_a [Ho	11.45	2.36
18	119569329	hCG1640785, isoform CRA_a [Homo sapiens]	10.34	19.35
19	221045918	unnamed protein product [Homo sapiens]	55.35	42.17
20	10435150	unnamed protein product [Homo sapiens]	8.80	9.42
21	63102283	CKAP4 protein [Homo sapiens]	10.21	12.07
22	62204505	RPL13 protein [Homo sapiens]	11.62	25.59
23	38014351	EEF1D protein, partial [Homo sapiens]	8.78	6.91
24	34785048	RPS6 protein, partial [Homo sapiens]	8.37	14.17
25	40040444	unnamed protein product [Homo sapiens]	9.85	16.28
26	530392193	PREDICTED: 6-phosphofructokinase type C isoform X3 [Homo sapie	11.23	10.59
27	55507560	unknown [Homo sapiens]	10.13	11.60
28	50513340	Chain A, Nmr Structure Of Human Cofilin	6.01	16.27
29	12643540	RecName: Full=Proteasome subunit alpha type-7; AltName: Full=Pr	7.53	13.71
30	485601396	Chain L, Structure Of The Human 40s Ribosomal Proteins	5.81	19.62
31	485601390	Chain O, Structure Of The Human 40s Ribosomal Proteins	7.59	18.54
32	122937211	proteasome-associated protein ECM29 homolog [Homo sapiens]	9.12	2.38
33	33341236	polytrophin [Homo sapiens]	12.15	0.81
34	118498368	kinectin isoform c [Homo sapiens]	13.50	3.38
35	296439473	RecName: Full=Dynein heavy chain 10, axonemal; AltName: Full=A	14.01	1.72
36	75517570	HNRPA1 protein [Homo sapiens]	21.53	20.97
37	119574650	hect domain and RLD 4, isoform CRA_e [Homo sapiens]	6.59	3.70
38	194386084	unnamed protein product [Homo sapiens]	8.84	21.34
39	259016354	RecName: Full=Protein ELYS; AltName: Full=Embryonic large molec	7.35	2.12
40	119590009	cytoplasmic linker 2, isoform CRA_a [Homo sapiens]	7.00	3.36
41	374532823	Golgin subfamily B member 1 isoform 4 [Homo sapiens]	7.57	0.82
42	4930167	Chain A, Human Muscle Aldolase	6.55	8.26
43	166007177	Chain T, Solution Structure Of Human Immunoglobulin M	21.94	10.13
44	225733966	Chain H, Human Thrombopoietin Neutralizing Antibody Tn1 Fab	414.86	40.55
45	1587352	globin 245	12.97	2.35
46	2661039	alpha enolase [Homo sapiens]	21.49	27.08
47	119619469	dystrophin (muscular dystrophy, Duchenne and Becker types), isofo	15.08	1.60
48	119615215	karyopherin (importin) beta 1, isoform CRA_b [Homo sapiens]	8.53	5.08
49	119612228	hCG15685 [Homo sapiens]	9.85	26.96
50	119607089	protein kinase, DNA-activated, catalytic polypeptide, isoform CRA_d	8.43	1.59
51	119600702	hCG1989166, isoform CRA_c, partial [Homo sapiens]	9.72	5.11
52	119590272	obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF, isofo	11.52	0.48
53	119582699	heat shock 70kDa protein 4, isoform CRA_b [Homo sapiens]	14.03	7.82
54	119576069	myosin XVA, isoform CRA_c [Homo sapiens]	5.35	0.74
55	21754583	unnamed protein product [Homo sapiens]	37.71	22.30
56	39645240	HNRPU protein, partial [Homo sapiens]	8.87	6.24
57	38114878	RPL13A protein, partial [Homo sapiens]	5.65	11.44
58	21619981	LMNA protein [Homo sapiens]	9.41	10.32
59	116283708	DHX9 protein [Homo sapiens]	9.41	6.58
60	40040430	unnamed protein product [Homo sapiens]	9.43	12.11

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2	20521005	KIAA0342 protein [Homo sapiens]	11.41	1.42
3	161172139	Chain B, Phosphorylation Independent Interactions Between 14-3-3	9.70	20.00
4	298508322	Chain F, Structure Of P97 N-D1 R95g Mutant In Complex With Atpg	7.81	10.02
5	13097600	Similar to ribosomal protein L23, partial [Homo sapiens]	6.22	20.15
6	645912958	major vault protein isoform 2 [Homo sapiens]	10.03	7.44
7	578801447	PREDICTED: tropomyosin alpha-3 chain isoform X6 [Homo sapiens]	6.61	11.27
8	89574029	mitochondrial ATP synthase, H+ transporting F1 complex beta subu	8.79	12.36
9	29334005	unnamed protein product [Homo sapiens]	5.46	1.20
10	119581825	ribosomal protein L26-like 1, isoform CRA_a [Homo sapiens]	5.38	15.86
11	153792663	myosin-2 [Homo sapiens]	5.64	1.80
12	2506816	RecName: Full=Versican core protein; AltName: Full=Chondroitin su	5.37	0.62
13	485601388	Chain U, Structure Of The Human 40s Ribosomal Proteins	4.93	15.13
14	4503513	eukaryotic translation initiation factor 3 subunit I [Homo sapiens]	4.25	6.15
15	118572681	RecName: Full=Phosphatidylinositol 3-kinase regulatory subunit alp	11.37	7.04
16	4501889	actin, gamma-enteric smooth muscle isoform 1 precursor [Homo sa]	32.38	28.46
17	119627197	zinc finger, FYVE domain containing 9, isoform CRA_c [Homo sapier	21.82	3.67
18	14589854	protein tyrosine phosphatase type IVA 3 isoform 2 [Homo sapiens]	4.02	20.95
19	119613293	hCG2027030, partial [Homo sapiens]	22.56	33.33
20	21758964	unnamed protein product [Homo sapiens]	4.04	5.92
21	485601399	Chain T, Structure Of The Human 40s Ribosomal Proteins	4.65	13.79
22	308153582	RecName: Full=Neuron navigator 2; AltName: Full=Helicase APC do	12.78	1.29
23	121925	RecName: Full=Histone H1.3; AltName: Full=Histone H1c; AltName:	9.78	19.91
24	238054406	RecName: Full=Keratin, type II cytoskeletal 1; AltName: Full=67 kD	405.11	58.70
25	485601395	Chain N, Structure Of The Human 40s Ribosomal Proteins	5.79	15.89
26	296439461	RecName: Full=Protein broad-minded; AltName: Full=TBC1 domain	6.13	2.23
27	118572619	RecName: Full=Adenylate cyclase type 5; AltName: Full=ATP pyrop	5.65	2.14
28	119598471	optic atrophy 1 (autosomal dominant), isoform CRA_b [Homo sapier	5.23	3.79
29	21928473	seven transmembrane helix receptor [Homo sapiens]	4.21	16.42
30	126362947	sodium channel protein type 3 subunit alpha isoform 2 [Homo sapie	4.05	1.49
31	578835066	PREDICTED: liprin-alpha-3 isoform X1 [Homo sapiens]	36.04	3.12
32	74756116	RecName: Full=Zinc finger and BTB domain-containing protein 41	13.25	2.75
33	47076897	unnamed protein product [Homo sapiens]	4.33	11.66
34	119577859	hypothetical protein FLJ20512 [Homo sapiens]	9.00	15.96
35	58761484	T-complex protein 1 subunit gamma isoform c [Homo sapiens]	6.86	3.75
36	193786214	unnamed protein product [Homo sapiens]	3.71	2.33
37	18375644	tyrosine-protein phosphatase non-receptor type 11 isoform 2 [Homc	4.17	5.22
38	182627587	RecName: Full=Putative ankyrin repeat domain-containing protein 3	4.65	1.55
39	119614677	proteasome (prosome, macropain) 26S subunit, ATPase, 5, isoform	4.49	9.05
40	27436873	E3 ubiquitin-protein ligase SHPRH isoform b [Homo sapiens]	9.48	2.29
41	24660442	MYO18A protein [Homo sapiens]	9.68	1.60
42	172044680	RecName: Full=Dynein heavy chain 2, axonemal; AltName: Full=Ax	6.47	0.86
43	119599446	coatamer protein complex, subunit beta 2 (beta prime), isoform CR	3.82	2.74
44	119608075	ribosomal protein L12, isoform CRA_d [Homo sapiens]	7.77	22.73
45	205371795	RecName: Full=BAH and coiled-coil domain-containing protein 1; Alt	6.57	1.65
46	530377992	PREDICTED: storkhead-box protein 2 isoform X1 [Homo sapiens]	11.49	1.39
47	119592618	ribosomal protein S9, isoform CRA_c [Homo sapiens]	4.68	11.51
48	119598167	hypothetical protein MGC4562, isoform CRA_d [Homo sapiens]	10.44	4.24
49	172046085	RecName: Full=Dynein heavy chain 14, axonemal; AltName: Full=A	9.70	1.51
50	194384416	unnamed protein product [Homo sapiens]	5.97	15.82
51	554790420	NAD(P)H dehydrogenase [quinone] 1 isoform d [Homo sapiens]	5.04	8.42
52	194385216	unnamed protein product [Homo sapiens]	7.01	9.69
53	219518228	Unknown (protein for MGC:177866) [Homo sapiens]	5.11	35.11
54	260099727	L-lactate dehydrogenase A chain isoform 5 [Homo sapiens]	7.82	14.94
55	194379468	unnamed protein product [Homo sapiens]	9.40	8.26
56	194375492	unnamed protein product [Homo sapiens]	9.10	4.52
57	221044142	unnamed protein product [Homo sapiens]	14.39	2.81
58	10436376	unnamed protein product [Homo sapiens]	5.24	7.43
59	321117084	RPS10-NUDT3 protein [Homo sapiens]	10.51	10.65
60	119597906	testis expressed sequence 9 [Homo sapiens]	3.63	6.01



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2	331284176	nuclear receptor corepressor 2 isoform 2 [Homo sapiens]	7.23	1.67
3	194378812	unnamed protein product [Homo sapiens]	5.16	8.52
4	256542310	dynein heavy chain 17, axonemal [Homo sapiens]	134.15	0.90
5	20150918	Chain A, Crystal Structure Of The N-Terminal Segment Of Human E	4.16	11.54
6	157883792	Chain A, Nmr Structure Of The Second Qrrm Domain Of Human Hnr	9.93	24.60
7	315583650	Chain A, Crystal Structure Of Human Dnmt1(646-1600) In Complex	6.15	4.50
8	223673784	Chain A, Human Acylphosphatase(Acph) Surface Charge-Optimized	3.62	20.20
9	284232	Ig heavy chain V region - human	16.94	45.13
10	224053	macroglobulin alpha2	8.30	2.69
11	119613451	nuclear transcription factor, X-box binding-like 1, isoform CRA_e [H	7.00	3.57
12	337451	hnRNP type A/B protein [Homo sapiens]	3.95	7.04
13	1136741	KIAA0002 [Homo sapiens]	5.27	4.08
14	551411917	DBF4-type zinc finger-containing protein 2 isoform 2 [Homo sapiens	10.86	3.10
15	120538705	ATP2B3 protein [Homo sapiens]	3.56	2.86
16	109734611	Myosin, heavy chain 10, non-muscle [Homo sapiens]	30.30	5.41
17	10438219	unnamed protein product [Homo sapiens]	6.26	4.80
18	4388965	Chain L, Antibody To Campath-1h Humanized Fab	22.72	23.36
19	119629468	hCG2011852 [Homo sapiens]	15.91	0.91
20	119629071	KIAA0564 protein, isoform CRA_b [Homo sapiens]	3.68	5.35
21	119628802	ribosomal protein L21, isoform CRA_c [Homo sapiens]	5.16	28.45
22	119625048	KM-HN-1 protein, isoform CRA_a [Homo sapiens]	11.01	8.30
23	119623948	euchromatic histone-lysine N-methyltransferase 2, isoform CRA_d [H	5.15	2.68
24	119623343	hCG1999854, isoform CRA_a [Homo sapiens]	3.70	1.75
25	119618140	hCG2015269, isoform CRA_c [Homo sapiens]	4.62	27.13
26	119617634	chaperonin containing TCP1, subunit 2 (beta), isoform CRA_a [Hom	4.92	4.69
27	119616102	microtubule-associated protein 1B, isoform CRA_a [Homo sapiens]	6.77	2.01
28	119614240	heterogeneous nuclear ribonucleoprotein A2/B1, isoform CRA_a [Ho	16.50	12.96
29	119613723	hCG1985901 [Homo sapiens]	13.92	5.59
30	119613335	ribosomal protein L9, isoform CRA_c [Homo sapiens]	4.45	14.07
31	119612929	spectrin, beta, non-erythrocytic 5 [Homo sapiens]	8.51	1.14
32	119612251	E3 ubiquitin protein ligase, HECT domain containing, 1, isoform CRA	113.25	1.76
33	119611612	translocated promoter region (to activated MET oncogene), isoform	9.20	1.62
34	119611276	kinesin-associated protein 3, isoform CRA_b [Homo sapiens]	3.08	1.68
35	119610957	TSR1, 20S rRNA accumulation, homolog (yeast), isoform CRA_d [Hc	9.69	6.51
36	119610275	solute carrier family 25 (mitochondrial carrier; adenine nucleotide tr	11.67	16.73
37	119609433	proteasome (prosome, macropain) 26S subunit, non-ATPase, 12, isc	3.97	7.05
38	119609377	Jumonji, AT rich interactive domain 1A (RBBP2-like), isoform CRA_b	7.29	1.83
39	119609186	nucleolar protein 1, 120kDa [Homo sapiens]	17.99	4.46
40	119604554	dynamitin 2, isoform CRA_e [Homo sapiens]	4.00	3.33
41	119600676	neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, W	6.02	0.69
42	119598667	eukaryotic translation initiation factor 4 gamma, 1, isoform CRA_e [I	5.32	1.60
43	119598006	vacuolar protein sorting 13C (yeast), isoform CRA_b [Homo sapiens	13.91	1.42
44	119597394	hCG19253, isoform CRA_d [Homo sapiens]	9.02	0.65
45	119592222	ribosomal protein S4, X-linked, isoform CRA_b, partial [Homo sapie	7.72	14.72
46	119591307	thyroid hormone receptor interactor 12, isoform CRA_f [Homo sapie	3.64	2.16
47	119590595	hCG1653748 [Homo sapiens]	3.87	44.74
48	119590527	dynein, axonemal, heavy polypeptide 7, isoform CRA_b [Homo sapie	13.29	1.52
49	119579125	protein tyrosine phosphatase, receptor type, D, isoform CRA_d [Hor	180.52	2.07
50	119576757	hCG39912, isoform CRA_b [Homo sapiens]	5.50	15.22
51	119574194	heterogeneous nuclear ribonucleoprotein H1 (H), isoform CRA_b [H	6.85	8.65
52	119573054	Rho GTPase activating protein 30, isoform CRA_c [Homo sapiens]	23.68	2.23
53	119572456	diaphanous homolog 3 (Drosophila), isoform CRA_c [Homo sapiens]	4.61	7.42
54	119570361	tolloid-like 2, isoform CRA_b [Homo sapiens]	9.19	3.84
55	119569863	tudor domain containing 1, isoform CRA_c [Homo sapiens]	5.29	3.00
56	119569579	dedicator of cytokinesis 1 [Homo sapiens]	4.72	1.60
57	221046404	unnamed protein product [Homo sapiens]	4.72	16.96
58	33096800	hypothetical protein [Homo sapiens]	5.88	6.90
59	194388520	unnamed protein product [Homo sapiens]	5.35	29.06
60	194381188	unnamed protein product [Homo sapiens]	3.66	2.08

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2	194374917	unnamed protein product [Homo sapiens]	4.63	9.63
3	194374597	unnamed protein product [Homo sapiens]	4.24	4.56
4	193788435	unnamed protein product [Homo sapiens]	36.09	3.11
5	193787899	unnamed protein product [Homo sapiens]	6.37	10.55
6	193785065	unnamed protein product [Homo sapiens]	10.49	8.30
7	158259305	unnamed protein product [Homo sapiens]	8.03	3.45
8	21756441	unnamed protein product [Homo sapiens]	10.25	9.17
9	7023915	unnamed protein product [Homo sapiens]	7.28	7.87
10	18676660	FLJ00229 protein [Homo sapiens]	6.89	2.87
11	47939143	YBX1 protein, partial [Homo sapiens]	4.68	11.65
12	28838367	LOXHD1 protein [Homo sapiens]	9.82	3.71
13	507898	glutamate transporter [Homo sapiens]	10.26	8.78
14	158253421	DNAH9 protein [Homo sapiens]	8.08	0.94
15	189053448	unnamed protein product [Homo sapiens]	12.58	5.90
16	47077415	unnamed protein product [Homo sapiens]	10.41	1.94
17	34533879	unnamed protein product [Homo sapiens]	9.21	5.81
18	34531561	unnamed protein product [Homo sapiens]	5.55	1.18
19	80476693	NBN protein [Homo sapiens]	3.56	4.03
20	12232589	TFNR [Homo sapiens]	4.65	1.14
21	40788890	KIAA0165 [Homo sapiens]	5.36	1.15
22	519882971	RecName: Full=Putative ciliary rootlet coiled-coil protein-like 3 prote	44.54	1.11
23	444738577	alternative protein IPO7 [Homo sapiens]	4.81	23.08
24	109730579	Collagen, type XXIV, alpha 1 [Homo sapiens]	7.98	2.39
25	56078799	Ribosomal protein S27a [Homo sapiens]	39.43	44.87
26	33440522	FBXO38 protein [Homo sapiens]	4.96	10.33
27	15928389	Unknown (protein for IMAGE:4158571), partial [Homo sapiens]	10.28	15.60
28	15680023	B-cell receptor-associated protein 31 [Homo sapiens]	5.32	16.67
29	13938339	ATP5A1 protein, partial [Homo sapiens]	6.09	4.90
30	847816	interferon omega-1, partial [Homo sapiens]	4.79	21.84
31	1147783	myosin-IXb [Homo sapiens]	8.27	1.19
32	1049053	encodes region of fatty acid synthase activity; FAS; multifunctional p	4.47	0.76
33	183272	glutamate decarboxylase [Homo sapiens]	9.80	5.73
34	5805196	Fas associated factor 1 [Homo sapiens]	7.52	4.08
35	2104553	Myosin heavy chain (MHY11) (5'partial) [Homo sapiens]	32.57	8.02
36	62822517	unknown [Homo sapiens]	4.20	8.05
37	62822099	unknown [Homo sapiens]	5.97	5.18
38	62630102	unknown [Homo sapiens]	5.90	0.76
39	11890755	RNA helicase II/Gu protein [Homo sapiens]	5.55	4.62
40	4583679	vacuolar protein sorting [Homo sapiens]	106.07	7.89
41	40807213	FAM179B protein [Homo sapiens]	9.17	3.51
42	62088708	ATP-binding cassette, sub-family F, member 1 variant [Homo sapier	6.55	5.06
43	62087794	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1 variant [	16.35	5.16
44	115333997	145 kDa nucleolar protein [Homo sapiens]	4.68	4.93
45	39644893	FOXRED1 protein [Homo sapiens]	4.20	7.90
46	63089650	unnamed protein product [Homo sapiens]	5.09	13.13
47	40980242	unnamed protein product [Homo sapiens]	8.51	42.00
48	40976912	unnamed protein product [Homo sapiens]	5.71	16.08
49	40976232	unnamed protein product [Homo sapiens]	4.68	25.81
50	313223	transcription elongation factor [Homo sapiens]	3.93	7.97
51	20521792	KIAA1208 protein [Homo sapiens]	3.74	2.21
52	1663704	KIAA0242 protein [Homo sapiens]	25.68	7.56
53	550545215	Chain D, 14-3-3gamma Complexed With The N-terminal Sequence C	10.30	24.71
54	296863377	Chain A, Crystal Structure Of The Catalytic Domain Of Flj14393	7.17	4.98
55	530418458	PREDICTED: cytochrome c oxidase subunit 4 isoform 2, mitochondri	3.86	18.11
56	530411223	PREDICTED: Golgi SNAP receptor complex member 1 isoform X2 [H	3.72	7.72
57	530404104	PREDICTED: exonuclease 3'-5' domain-containing protein 2 isoform	4.21	10.93
58	530392546	PREDICTED: glycolipid N-tetradecanoyltransferase 2 isoform X1	18.56	6.87
59	530382430	PREDICTED: dystonin isoform X7 [Homo sapiens]	16.43	1.13
60	578806816	PREDICTED: 26S proteasome non-ATPase regulatory subunit 6 isofc	6.98	8.82



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2	530369227	PREDICTED: rho guanine nucleotide exchange factor 4 isoform X2 [	3.14	0.65
3	530363026	PREDICTED: outer dense fiber protein 2-like isoform X4 [Homo sapi	7.18	6.50
4	519674682	immunoglobulin A heavy chain variable region, partial [Homo sapien	49.28	11.97
5	381142222	immunoglobulin light chain variable region, partial [Homo sapiens]	4.42	30.19
6	459214638	KIF5B-RET(NM_020630)_K24;R11 fusion protein [Homo sapiens]	10.77	4.10
7	442564354	von Willebrand factor [Homo sapiens]	3.65	0.59
8	374074366	Chain A, Crystal Structure Of 14-3-3 Epsilon With Mlf1 Peptide	6.71	16.81
9	319443270	Chain A, Nmr Structure Of Calcium-Loaded Stim2 Ef-Sam.	10.11	7.33
10	190406	profilaggrin, partial [Homo sapiens]	4.12	1.40
11	14625824	moesin/anaplastic lymphoma kinase fusion protein [Homo sapiens]	4.56	3.61
12	403456	26S protease (S4) regulatory subunit [Homo sapiens]	3.71	3.41
13	62871194	immunoglobulin alpha heavy chain variable region [Homo sapiens]	10.43	11.73
14	609412463	Chain D, Crystal Structure Of Human Lnh2b-h2a.z-anp32e	10.86	15.31
15	578837382	PREDICTED: putative SEC14-like protein 6 isoform X3 [Homo sapien	3.61	5.59
16	578837055	PREDICTED: calcineurin-binding protein cabin-1 isoform X12 [Homo	12.19	2.10
17	578832590	PREDICTED: zinc finger protein 407 isoform X3 [Homo sapiens]	7.82	1.66
18	578831328	PREDICTED: actin, cytoplasmic 2 isoform X1 [Homo sapiens]	40.33	21.15
19	578826913	PREDICTED: SHC-transforming protein 4 isoform X3 [Homo sapiens]	4.12	5.64
20	578808176	PREDICTED: SH3 domain and tetratricopeptide repeat-containing pr	6.01	1.63
21	578807393	PREDICTED: leucine-, glutamate- and lysine-rich protein 1 isoform >	56.25	5.28
22	578804532	PREDICTED: telomere-associated protein RIF1 isoform X4 [Homo sa	4.58	0.90
23	38305350	antigen MLAA-44 [Homo sapiens]	3.10	4.02
24	2253417	Trip230 [Homo sapiens]	13.38	1.97
25	284930095	Treslin [Homo sapiens]	3.16	0.58
26	11527207	CGI-85 [Homo sapiens]	3.66	7.92
27	40286771	brain leucine zipper protein [Homo sapiens]	6.36	9.77
28	52545570	hypothetical protein [Homo sapiens]	3.15	1.09
29	21739524	hypothetical protein [Homo sapiens]	26.00	3.82
30	13093781	hypothetical protein [Homo sapiens]	3.17	3.17
31	12052969	hypothetical protein [Homo sapiens]	4.34	6.65
32	51476290	hypothetical protein [Homo sapiens]	3.60	1.73
33	23712	myoblast antigen 24.1D5 [Homo sapiens]	4.38	6.57
34	62897645	eukaryotic translation elongation factor 1 alpha 1 variant [Homo sap	55.32	35.57
35	133251534	piwi-like 1 [Homo sapiens]	6.44	3.77
36	29823335	unnamed protein product [Homo sapiens]	7.32	1.65
37	2804273	alpha actinin 4 [Homo sapiens]	13.52	7.13
38	7643786	HDCMD34P [Homo sapiens]	1.51	3.64
39	119583237	ankyrin repeat domain 19, isoform CRA_a [Homo sapiens]	11.28	7.95
40	74720814	RecName: Full=AF4/FMR2 family member 4; AltName: Full=ALL1-fu	5.62	0.95
41	119578686	zinc finger and BTB domain containing 5 [Homo sapiens]	4.20	2.07
42	8569517	Chain B, Migration Inhibitory Factor-Related Protein 8 From Human	2.03	12.90
43	146387470	Chain F, The Crystal Structure Of Human Gins Core Complex	2.53	8.11
44	226246523	fanconi-associated nuclease 1 isoform a [Homo sapiens]	10.59	1.47
45	22653683	RecName: Full=Chromatin accessibility complex protein 1; Short=Cf	2.26	11.45
46	28380027	RecName: Full=Putative dimethylaniline monooxygenase [N-oxide-f	2.20	2.78
47	21542000	RecName: Full=Hsp90 co-chaperone Cdc37; AltName: Full=Hsp90 c	2.26	2.38
48	158519875	RecName: Full=Cation channel sperm-associated protein subunit be	2.56	2.33
49	12643409	RecName: Full=Matrin-3	6.34	3.78
50	205831135	RecName: Full=Putative GTP-binding protein FLJ12595	3.59	10.81
51	7328086	hypothetical protein [Homo sapiens]	2.50	12.45
52	1170862	RecName: Full=Melanoma-associated antigen 9; AltName: Full=Can	4.80	4.76
53	119608307	paired related homeobox 2 [Homo sapiens]	3.55	5.53
54	1586821	sulphamidase	2.10	2.79
55	119630629	chromosome 20 open reading frame 79 [Homo sapiens]	2.96	16.67
56	7717443	PRED58 [Homo sapiens]	2.27	9.02
57	1705750	RecName: Full=CCAAT/enhancer-binding protein gamma; Short=C/	2.26	11.33
58	32469765	RecName: Full=Dedicator of cytokinesis protein 2	6.09	1.69
59	75706636	ubiquitously transcribed tetratricopeptide repeat protein Y-linked tra	15.73	1.39
60	131616	RecName: Full=Trifunctional purine biosynthetic protein adenosine-	4.57	3.47

1	130370	RecName: Full=Pneumadin; Short=PNM	1.53	50.00
2	52783599	RecName: Full=Guanine nucleotide-binding protein G(I)/G(S)/G(O)	2.04	16.18
3	4503041	corticoliberin preproprotein [Homo sapiens]	2.19	10.71
4	119601616	eukaryotic translation initiation factor 2B, subunit 2 beta, 39kDa [Homo sapiens]	2.15	5.13
5	13124319	RecName: Full=Kinesin heavy chain isoform 5C; AltName: Full=Kine	7.59	3.13
6	119607932	mitochondrial ribosome recycling factor, isoform CRA_e [Homo sapiens]	2.56	17.26
7	3183214	RecName: Full=Uncharacterized protein KIAA0087	4.37	10.14
8	24418479	RecName: Full=Potassium voltage-gated channel subfamily G memt	2.53	6.24
9	7959923	PRO2738 [Homo sapiens]	2.04	11.29
10	119618007	IKK interacting protein, isoform CRA_a [Homo sapiens]	4.78	3.71
11	14250487	EML4 protein [Homo sapiens]	1.51	17.74
12	119579805	nyctalopin, isoform CRA_a [Homo sapiens]	2.01	2.49
13	357528797	RecName: Full=FRAS1-related extracellular matrix protein 3; Flags:	2.81	1.03
14	118197270	RANBP2-like and GRIP domain-containing protein 5/6 isoform 2 [Ho	2.04	2.32
15	154091032	ankyrin repeat domain-containing protein 22 [Homo sapiens]	9.45	10.99
16	20806097	nucleolar complex protein 3 homolog [Homo sapiens]	14.39	4.88
17	119569197	chromosome 6 open reading frame 57, isoform CRA_a [Homo sapie	2.69	15.74
18	223718169	transmembrane O-methyltransferase isoform LRTOMT2b [Homo sap	2.61	10.36
19	37537558	nuclear apoptosis-inducing factor 1 [Homo sapiens]	7.03	3.98
20	119595722	chromosome 20 open reading frame 59, isoform CRA_c, partial [Ho	2.52	8.80
21	119600375	potassium channel tetramerisation domain containing 13, isoform C	9.44	9.42
22	119617055	keratin 5b, isoform CRA_a [Homo sapiens]	37.90	8.54
23	33872248	Unknown (protein for IMAGE:3632616), partial [Homo sapiens]	2.01	4.52
24	119610692	F-box protein 39 [Homo sapiens]	52.00	4.07
25	21758935	unnamed protein product [Homo sapiens]	5.18	4.69
26	74729423	RecName: Full=Putative uncharacterized protein encoded by MAPKA	7.12	14.39
27	119595512	hypothetical protein FLJ38159 [Homo sapiens]	1.58	1.87
28	119612054	cyclic nucleotide binding domain containing 1 [Homo sapiens]	2.03	3.44
29	21750654	unnamed protein product [Homo sapiens]	2.06	14.94
30	74762570	RecName: Full=Putative protein FAM10A5; AltName: Full=Suppressi	3.94	4.61
31	119622951	chromosome 11 open reading frame 36, isoform CRA_a [Homo sapi	2.04	5.06
32	30172728	unknown [Homo sapiens]	2.07	23.88
33	119163	RecName: Full=Elongation factor 1-beta; Short=EF-1-beta	1.89	3.11
34	18606290	VPRBP protein [Homo sapiens]	3.16	1.13
35	7739449	hnRNP 2H9E [Homo sapiens]	3.89	12.23
36	49457368	TBCA [Homo sapiens]	4.22	16.67
37	13623191	KIAA0652 protein [Homo sapiens]	6.30	3.70
38	119612058	matrix metalloproteinase 16 (membrane-inserted), isoform CRA_b [H	116.07	2.19
39	149240951	Chain D, Human Milk Xanthine Oxidoreductase	6.41	1.43
40	119629135	hCG1641173 [Homo sapiens]	2.52	9.65
41	156071462	ADP/ATP translocase 3 [Homo sapiens]	6.92	10.07
42	121945944	RecName: Full=La-related protein 7; AltName: Full=La ribonucleopr	2.62	4.98
43	120587027	ubiquitin carboxyl-terminal hydrolase 31 [Homo sapiens]	4.44	2.14
44	48146637	FLJ10525 [Homo sapiens]	2.26	4.86
45	71153032	RecName: Full=Olfactory receptor 7D4; AltName: Full=OR19-B; Alt	3.05	2.88
46	21928237	seven transmembrane helix receptor [Homo sapiens]	6.61	13.25
47	119606123	MPF-like, isoform CRA_b [Homo sapiens]	3.62	2.56
48	578836199	PREDICTED: polyadenylate-binding protein 1-like isoform X3 [Homo	14.03	5.45
49	119570368	zinc finger protein 518 [Homo sapiens]	2.59	1.62
50	28193122	unnamed protein product [Homo sapiens]	2.86	8.14
51	218512159	RecName: Full=Putative zinc finger protein 840	8.02	0.98
52	21730760	Chain V, Structure Of A Hif-1a-Pvhl-Elonginb-Elonginc Complex	2.02	10.00
53	327478526	RecName: Full=Myosin-14; AltName: Full=Myosin heavy chain 14; A	14.41	2.51
54	172048422	RecName: Full=Importin subunit alpha-8; AltName: Full=Karyopher	3.90	3.68
55	189041198	RecName: Full=Putative uncharacterized protein C6orf183	2.53	6.82
56	31874135	hypothetical protein [Homo sapiens]	8.65	10.20
57	152012941	Interferon induced transmembrane protein 5 [Homo sapiens]	2.55	22.73
58	31074637	type I inner root sheath specific keratin 25 irs1 [Homo sapiens]	29.35	5.33
59	119631244	myosin IB, isoform CRA_a [Homo sapiens]	5.38	1.58

1	119582013	family with sequence similarity 71, member B [Homo sapiens]	2.10	3.80
2	189364	long overlapping ORF; NH2 terminus uncertain, partial [Homo sapie	2.08	8.27
3	119614428	hCG2010019, partial [Homo sapiens]	2.03	9.58
4	3859988	proteasome subunit p58 [Homo sapiens]	2.10	10.43
5	30269262	pol protein [Homo sapiens]	2.67	2.28
6	546231210	serine/threonine-protein phosphatase 4 regulatory subunit 3A isofor	3.80	3.37
7	21739618	hypothetical protein [Homo sapiens]	3.78	2.60
8	48146497	TNFRSF21 [Homo sapiens]	2.05	8.06
9	22002426	brain peptide A1 [Homo sapiens]	3.13	24.44
10	237757312	synaptojanin-1 isoform c [Homo sapiens]	3.86	1.16
11	119626181	nucleoporin 54kDa, isoform CRA_b [Homo sapiens]	1.86	2.41
12	166919564	RecName: Full=Actin filament-associated protein 1; AltName: Full=1	17.92	3.15
13	119621549	retinoblastoma binding protein 8, isoform CRA_b [Homo sapiens]	2.51	2.08
14	194377758	unnamed protein product [Homo sapiens]	7.96	2.80
15	160017591	RecName: Full=Coiled-coil domain-containing protein 15	9.60	5.15
16	119581560	polypyrimidine tract binding protein 1, isoform CRA_e [Homo sapien	2.19	4.06
17	148277111	putative oncomodulin-2 [Homo sapiens]	1.58	8.26
18	117949375	RecName: Full=Calpain-13; AltName: Full=Calcium-activated neutra	1.75	1.64
19	34532125	unnamed protein product [Homo sapiens]	2.21	8.03
20	113414869	TBC1 domain family, member 8B (with GRAM domain) [Homo sapie	1.51	1.11
21	37782410	FP17581 [Homo sapiens]	4.55	18.58
22	194294556	SET-binding protein isoform b [Homo sapiens]	1.67	3.31
23	34527615	unnamed protein product [Homo sapiens]	7.45	10.94
24	34527153	unnamed protein product [Homo sapiens]	2.23	13.67
25	34526674	unnamed protein product [Homo sapiens]	1.69	6.67
26	34535305	unnamed protein product [Homo sapiens]	4.25	7.36
27	34531380	unnamed protein product [Homo sapiens]	2.85	13.50
28	119625299	guanylate cyclase 1, soluble, alpha 3, isoform CRA_c [Homo sapiens	8.46	9.09
29	34189915	RBM26 protein [Homo sapiens]	3.49	21.31
30	62122911	interleukin-31 precursor [Homo sapiens]	1.55	3.66
31	440575863	alternative protein GRINL1A [Homo sapiens]	3.01	37.21
32	62088078	DHX57 protein variant [Homo sapiens]	2.60	2.86
33	109255232	centrosomal protein of 170 kDa isoform gamma [Homo sapiens]	5.59	1.30
34	119609753	hCG1989313, isoform CRA_g, partial [Homo sapiens]	10.39	2.87
35	119593568	protein kinase N2, isoform CRA_b [Homo sapiens]	5.65	3.64
36	34596303	GRINL1A combined protein Gcom11 precursor [Homo sapiens]	2.50	5.54
37	119577949	piggyBac transposable element derived 2, isoform CRA_b [Homo sa	2.50	8.21
38	62088124	Abl-philin 2 isoform 3 variant [Homo sapiens]	1.99	4.90
39	62089276	transcription termination factor, RNA polymerase II variant [Homo s	2.55	15.76
40	194382676	unnamed protein product [Homo sapiens]	2.04	6.18
41	62087632	solute carrier family 37 (glycerol-6-phosphate transporter), member	4.93	3.08
42	62087594	RNA binding motif protein 14 variant [Homo sapiens]	2.31	1.27
43	530421763	PREDICTED: protein PBDC1 isoform X1 [Homo sapiens]	1.55	3.02
44	23271324	CMIP protein [Homo sapiens]	2.08	2.10
45	194374751	unnamed protein product [Homo sapiens]	2.04	11.02
46	157829345	ubiquitously transcribed tetratricopeptide repeat protein X-linked tra	2.89	2.55
47	194383268	unnamed protein product [Homo sapiens]	2.51	7.33
48	84708830	TUBB6 protein [Homo sapiens]	27.96	12.75
49	194387516	unnamed protein product [Homo sapiens]	2.08	7.02
50	119613529	hCG1642860 [Homo sapiens]	8.47	6.27
51	119613673	hCG25333, isoform CRA_a [Homo sapiens]	5.70	6.88
52	88999767	autogenous vein graft remodeling associated protein 5 [Homo sapie	2.68	4.09
53	112891	RecName: Full=Putative alpha-1-antitrypsin-related protein; AltNam	2.05	4.29
54	475808427	POTE ankyrin domain family member I [Homo sapiens]	12.75	3.26
55	18089180	LOC644246 protein, partial [Homo sapiens]	4.12	24.14
56	205831107	RecName: Full=Protein FAM196B	5.46	4.86
57	21754281	unnamed protein product [Homo sapiens]	1.53	2.86
58	143928063	RecName: Full=Serine/arginine repetitive matrix protein 2; AltName	25.49	1.89
59	215274269	RecName: Full=Spectrin beta chain, erythrocytic; AltName: Full=Bel	5.31	1.12
60				

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2	56675094	cathepsin L-like protein [Homo sapiens]	1.52	2.75
3	62087622	BM-010 variant [Homo sapiens]	2.16	23.88
4	190410954	RecName: Full=Transmembrane and coiled-coil domain-containing p	2.01	3.91
5	193787670	unnamed protein product [Homo sapiens]	34.60	5.74
6	119580802	hypothetical protein LOC63929, isoform CRA_b [Homo sapiens]	4.14	5.61
7	119585275	coiled-coil domain containing 51, isoform CRA_a [Homo sapiens]	3.27	11.26
8	221043670	unnamed protein product [Homo sapiens]	1.74	6.45
9	4514403	squamous cell carcinoma antigen 2 [Homo sapiens]	2.54	13.73
10	194384240	unnamed protein product [Homo sapiens]	108.64	26.31
11	116283351	CCDC6 protein [Homo sapiens]	2.84	3.89
12	313104224	RecName: Full=LON peptidase N-terminal domain and RING finger p	3.73	3.05
13	71297232	PPM1K protein [Homo sapiens]	1.68	4.67
14	154426306	kinesin-like protein KIF24 [Homo sapiens]	3.24	0.44
15	28302161	CCBE1 protein [Homo sapiens]	2.01	8.37
16	51094451	FLJ42291 protein [Homo sapiens]	2.16	1.48
17	540344531	acetylcholinesterase isoform 3 precursor [Homo sapiens]	10.26	2.09
18	119586982	hCG14941, isoform CRA_a [Homo sapiens]	5.69	1.55
19	215273970	RecName: Full=Protein diaphanous homolog 1; AltName: Full=Diapl	8.51	2.20
20	73621116	RecName: Full=Protein KIAA1045	2.00	4.25
21	155030220	sister chromatid cohesion protein PDS5 homolog A isoform 3 [Homo	1.53	0.83
22	151347347	MUC1 isoform M8 [Homo sapiens]	2.24	7.91
23	119630988	isocitrate dehydrogenase 3 (NAD+) beta, isoform CRA_b [Homo sap	2.23	8.15
24	194375209	unnamed protein product [Homo sapiens]	2.02	3.16
25	634743229	inhibitor of growth protein 2 isoform 2 [Homo sapiens]	2.16	7.08
26	17511715	FLYWCH1 protein [Homo sapiens]	2.09	3.84
27	530403029	PREDICTED: protein AHNAK2 isoform X1 [Homo sapiens]	4.83	1.86
28	211059433	telomere repeats-binding bouquet formation protein 1 [Homo sapier	8.59	3.44
29	1515452	tissue plasminogen activator, partial [Homo sapiens]	2.08	13.25
30	194382670	unnamed protein product [Homo sapiens]	2.54	10.70
31	119627029	hypothetical protein FLJ10986, isoform CRA_d [Homo sapiens]	5.20	4.10
32	194378698	unnamed protein product [Homo sapiens]	4.18	5.16
33	194383408	unnamed protein product [Homo sapiens]	2.23	9.50
34	193787232	unnamed protein product [Homo sapiens]	9.93	7.00
35	194386226	unnamed protein product [Homo sapiens]	4.02	12.90
36	194387020	unnamed protein product [Homo sapiens]	2.80	11.17
37	194384530	unnamed protein product [Homo sapiens]	2.77	14.11
38	194384124	unnamed protein product [Homo sapiens]	2.04	1.47
39	194377112	unnamed protein product [Homo sapiens]	2.22	6.56
40	194379488	unnamed protein product [Homo sapiens]	1.50	1.86
41	194389024	unnamed protein product [Homo sapiens]	2.14	7.59
42	194381310	unnamed protein product [Homo sapiens]	2.61	5.86
43	194382494	unnamed protein product [Homo sapiens]	4.80	7.34
44	194377718	unnamed protein product [Homo sapiens]	2.17	8.06
45	194384754	unnamed protein product [Homo sapiens]	2.07	2.01
46	194374107	unnamed protein product [Homo sapiens]	2.67	10.29
47	194373459	unnamed protein product [Homo sapiens]	2.64	11.35
48	194389532	unnamed protein product [Homo sapiens]	25.17	7.24
49	194384220	unnamed protein product [Homo sapiens]	2.18	1.46
50	194386174	unnamed protein product [Homo sapiens]	2.53	5.81
51	194383904	unnamed protein product [Homo sapiens]	1.67	5.69
52	194387024	unnamed protein product [Homo sapiens]	3.01	4.65
53	300116271	3-oxo-5-beta-steroid 4-dehydrogenase isoform 2 [Homo sapiens]	1.69	4.56
54	194382774	unnamed protein product [Homo sapiens]	2.59	8.10
55	194377168	unnamed protein product [Homo sapiens]	4.57	13.66
56	194375932	unnamed protein product [Homo sapiens]	216.61	6.42
57	194384396	unnamed protein product [Homo sapiens]	3.64	2.54
58	194388594	unnamed protein product [Homo sapiens]	4.47	5.95
59	194375063	unnamed protein product [Homo sapiens]	9.65	12.67
60	194389318	unnamed protein product [Homo sapiens]	2.12	2.42

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2	194378362	unnamed protein product [Homo sapiens]	2.14	4.05
3	214010191	ribonuclease H2 subunit B isoform 2 [Homo sapiens]	2.03	7.39
4	300669606	RecName: Full=Rho guanine nucleotide exchange factor 33	2.01	1.54
5	119591539	ubiquitin-conjugating enzyme E2F (putative), isoform CRA_f [Homo	1.57	9.52
6	119613486	oxoglutarate dehydrogenase-like, isoform CRA_a [Homo sapiens]	3.75	2.12
7	221316674	dimethylaniline monooxygenase [N-oxide-forming] 5 isoform 2 [Hon	2.63	4.53
8	219520978	MYBPHL protein [Homo sapiens]	2.63	8.46
9	354548834	zinc transporter 5 isoform 3 [Homo sapiens]	3.16	7.79
10	221039610	unnamed protein product [Homo sapiens]	3.61	4.79
11	221045258	unnamed protein product [Homo sapiens]	2.28	4.46
12	221041774	unnamed protein product [Homo sapiens]	4.46	5.26
13	221041900	unnamed protein product [Homo sapiens]	1.58	4.73
14	221043242	unnamed protein product [Homo sapiens]	6.19	6.09
15	195928000	nuclear factor of activated T-cells c4 isoform IC-IXS [Homo sapiens]	7.27	2.30
16	119590976	ribosomal protein L37a, isoform CRA_b [Homo sapiens]	2.07	12.07
17	52545699	hypothetical protein [Homo sapiens]	10.71	2.23
18	119584380	bromodomain and PHD finger containing, 1, isoform CRA_e [Homo s	4.33	1.73
19	119590674	amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candi	11.11	8.39
20	220897513	LUC7-like (S. cerevisiae) [Homo sapiens]	1.54	21.88
21	193785596	unnamed protein product [Homo sapiens]	27.29	25.94
22	194388148	unnamed protein product [Homo sapiens]	3.88	5.88
23	194391382	unnamed protein product [Homo sapiens]	4.18	7.34
24	545479145	mediator of RNA polymerase II transcription subunit 30 isoform 2 [H	2.52	13.29
25	378405228	RecName: Full=Tetratricopeptide repeat protein 40	4.76	1.62
26	194377158	unnamed protein product [Homo sapiens]	2.02	6.94
27	119629284	integrator complex subunit 6, isoform CRA_b [Homo sapiens]	4.53	4.23
28	378405232	RecName: Full=StAR-related lipid transfer protein 9; AltName: Full=	4.41	0.72
29	193786637	unnamed protein product [Homo sapiens]	4.91	10.68
30	119615050	pyruvate dehydrogenase kinase, isozyme 2, isoform CRA_c [Homo s	3.01	5.83
31	578825442	PREDICTED: egl nine homolog 3 isoform X1 [Homo sapiens]	2.40	8.97
32	21322210	MHC class II HLA-DQ [Homo sapiens]	1.51	7.50
33	194383974	unnamed protein product [Homo sapiens]	2.07	4.29
34	119588806	general transcription factor IIH, polypeptide 1, 62kDa, isoform CRA_	2.67	4.63
35	6815237	5-hydroxytryptamine (serotonin) receptor 1F [Homo sapiens]	2.55	8.22
36	119632249	hCG2044193 [Homo sapiens]	2.18	1.41
37	119588809	Hermansky-Pudlak syndrome 5, isoform CRA_b, partial [Homo sapie	2.19	3.00
38	28375611	unnamed protein product [Homo sapiens]	7.03	8.12
39	194378470	unnamed protein product [Homo sapiens]	2.02	4.86
40	194378082	unnamed protein product [Homo sapiens]	1.55	3.23
41	221046300	unnamed protein product [Homo sapiens]	2.03	7.51
42	193787268	unnamed protein product [Homo sapiens]	5.78	3.09
43	9587153	xeroderma pigmentosum complementation group G protein splice va	1.50	3.02
44	193787064	unnamed protein product [Homo sapiens]	2.65	6.74
45	62088934	CDC10 protein variant [Homo sapiens]	1.51	2.10
46	75517448	TMC1 protein [Homo sapiens]	6.05	2.20
47	194386170	unnamed protein product [Homo sapiens]	2.24	5.63
48	221043808	unnamed protein product [Homo sapiens]	2.35	4.39
49	194385852	unnamed protein product [Homo sapiens]	3.88	4.05
50	194388748	unnamed protein product [Homo sapiens]	2.05	3.95
51	221040478	unnamed protein product [Homo sapiens]	6.75	3.50
52	58041810	tRNA isopentenylpyrophosphate transferase isoform 6 [Homo sapier	3.43	6.75
53	221044102	unnamed protein product [Homo sapiens]	8.41	3.52
54	164691199	unnamed protein product [Homo sapiens]	2.24	6.64
55	332164666	caveolin-2 isoform d [Homo sapiens]	2.63	46.84
56	30722352	hypothetical protein [Homo sapiens]	2.04	1.95
57	194383366	unnamed protein product [Homo sapiens]	2.33	3.34
58	17372671	RecName: Full=Ataxin-10; AltName: Full=Brain protein E46 homolog	8.21	9.47
59	221042358	unnamed protein product [Homo sapiens]	3.46	5.42
60	119621321	hCG1990625, isoform CRA_a [Homo sapiens]	3.93	17.81



1	40035509	unnamed protein product [Homo sapiens]	2.62	5.99
2	86577744	HSPA5 protein [Homo sapiens]	26.15	19.24
3	119589905	ribosomal protein S15, isoform CRA_a [Homo sapiens]	2.52	11.02
4	117414137	retinitis pigmentosa 1-like 1 protein [Homo sapiens]	4.30	0.33
5	119593515	bromodomain, testis-specific, isoform CRA_b [Homo sapiens]	8.44	2.75
6	119612282	collagen triple helix repeat containing 1, isoform CRA_c [Homo sapiens]	2.07	6.55
7	172046061	RecName: Full=Immunoglobulin superfamily member 3; Short=IgSF	2.14	0.75
8	347954819	ankyrin repeat domain-containing protein 18B [Homo sapiens]	1.57	1.09
9	10437855	unnamed protein product [Homo sapiens]	6.63	9.92
10	119604261	nucleoporin 205kDa, isoform CRA_a [Homo sapiens]	3.11	0.94
11	449061866	RecName: Full=Protein C9orf69; AltName: Full=Herpes virus UL25-t	4.13	6.47
12	353251637	Chain E, Orientation Of Rna Polymerase Ii Within The Human Vp16-	1.68	3.26
13	12803397	ATRX protein [Homo sapiens]	1.84	7.78
14	73920089	RecName: Full=Potassium channel subfamily T member 1; AltName	2.05	0.65
15	145585268	unnamed protein product [Homo sapiens]	3.49	3.30
16	119595343	phosphoglucomutase 2-like 1 [Homo sapiens]	2.01	2.41
17	119604667	zinc finger protein 625, isoform CRA_a [Homo sapiens]	2.89	6.21
18	401015109	tumor necrosis factor receptor superfamily member 11A isoform 4 p	2.41	4.01
19	78101501	Chain D, Crystal Structure Of Kh1 Domain Of Human Poly(C)-Bindin	3.52	17.81
20	157880239	Chain B, Crystal Structure Of Human Trypsin 1: Unexpected Phosph	23.23	8.04
21	157831398	Chain A, Human Mannose Binding Protein Carbohydrate Recognition	2.68	9.22
22	401817558	Chain B, Human IgG1 Fc Fragment Heterodimer	16.14	12.56
23	239782025	Chain D, Human Sahn-Like Domain Of Human Adenosylhomocysteir	8.95	3.22
24	61679820	Chain A, Solution Structure Of Human Prolactin	2.14	8.04
25	13786848	Chain B, Human Heart L-Lactate Dehydrogenase H Chain, Ternary C	6.09	8.11
26	342350991	Chain B, Crystal Structure Of Human NADPH-Cytochrome P450 Redu	6.42	3.72
27	119610899	Tax1 (human T-cell leukemia virus type I) binding protein 3, isoform	2.53	38.30
28	544192134	Chain F, Structural Basis For Autoactivation Of Human Mst2 Kinase /	5.00	4.68
29	532138036	Chain B, Crystal Structure Of Mers-cov Complexed With Human Dpp	1.51	2.94
30	413915762	Chain A, Homologous Domain Of Human Fkbp25	3.82	11.21
31	167745132	Chain A, Human Poly(Adp-Ribose) Polymerase 3, Catalytic Fragment	2.02	3.36
32	110590621	Chain B, Structure Of Human Mip-3a Chemokine	2.01	11.59
33	349587833	Chain J, Crystal Structure Of Full-Length Human Peroxiredoxin 4 Wit	3.06	8.54
34	238828124	Chain C, Crystal Structure Of The Human Rad9-Hus1-Rad1 Complex	2.02	6.46
35	78101741	Chain A, 14-3-3 Protein Beta (human) In Complex With Exoenzyme	8.27	14.29
36	61679988	Chain B, Crystal Structure Of The Toll/INTERLEUKIN-1 Receptor (Tir)	8.32	11.95
37	512125429	Chain B, Protease-induced Heterodimer Of Human Triosephosphate	3.81	8.13
38	491668222	Chain A, Crystal Structure Of The Human Cdk5 Kinase Domain	11.29	8.88
39	157835957	Chain A, Crystal Structure Of The Extracellular Domain Of Human G	2.23	9.63
40	564731264	Chain B, Crystal Structure Of The Extracellular Domain Of Human G	2.08	1.85
41	159163949	Chain A, Solution Structure Of J-Domain From Human Dnaj Subfami	1.55	11.54
42	159163860	Chain A, Solution Structure Of Rsg1 Ruh-039, A Fragment Of C- Terr	2.00	21.05
43	7245805	Chain D, Human Erythrocyte Catalase	1.73	1.41
44	534286037	Chain G, Crystal Structure Of Human Nucleosome Core Particle Lack	9.76	22.58
45	42543655	Chain D, Crystal Structure Of Human Anti-hiv-1 Gp120 Reactive Anti	13.27	14.02
46	361129718	Chain A, Solution Structure Of The Dimerization Domain Of Human I	4.30	23.19
47	179744	voltage-dependent calcium channel beta-2 subunit [Homo sapiens]	2.54	6.28
48	232472	nucleotide diphosphate kinase subunit A, p19/nm23-H1 [human, Pe	2.31	100.00
49	252092	HLBP14=14-kDa laminin binding protein [human, melanoma cells, P	3.89	100.00
50	2135467	Ig heavy chain - human (fragment)	7.05	15.70
51	345758	lamin B2 - human (fragment)	7.66	4.27
52	284187	Ig heavy chain V region (DP-30) - human (fragment)	4.41	19.00
53	87330	DNA-binding protein GRF-1 - human	3.57	1.80
54	300197	V gamma 9JP/V delta 2DJ1 T cell receptor {cytotoxic clone SC1, rea	8.46	80.00
55	87804	Ig heavy chain precursor V-D-J region (JP-FL-5) - human	2.73	18.92
56	223429	tubulin beta	33.62	17.34
57	449754	MLL-AF4 fusion protein	8.82	1.25
58	311772087	Chain E, Structure Of Il-13 Antibody H2I6, A Humanized Variant Of C	6.95	9.82
59	2689443	R28830_2 [Homo sapiens]	2.17	2.33
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2	391358156	RecName: Full=Kinetochore protein Spc24; Short=hSpc24	4.27	7.11
3	3482907	CTF5 [Homo sapiens]	2.87	45.45
4	10438968	unnamed protein product [Homo sapiens]	1.56	3.31
5	10437189	unnamed protein product [Homo sapiens]	2.62	5.19
6	10437000	unnamed protein product [Homo sapiens]	2.16	3.36
7	4406651	h-sco1 [Homo sapiens]	3.80	11.05
8	49168450	ANXA9 [Homo sapiens]	5.16	9.17
9	119609484	ATP-binding cassette, sub-family A (ABC1), member 10, isoform CR	8.37	2.53
10	1699038	ABC3 [Homo sapiens]	2.68	1.70
11	2826857	KIF3C [Homo sapiens]	2.54	38.46
12	525343614	replication factor C subunit 2 isoform 5 [Homo sapiens]	12.85	9.13
13	452722259	immunoglobulin kappa light chain variable region, partial [Homo sap	5.92	12.86
14	119622276	thioredoxin domain containing 9, isoform CRA_c [Homo sapiens]	6.41	2.66
15	119622225	ring finger protein 149, isoform CRA_d [Homo sapiens]	3.63	4.08
16	119615402	heparan sulfate proteoglycan 2 (perlecan), isoform CRA_b [Homo sa	5.81	0.78
17	119610699	solute carrier family 13 (sodium-dependent citrate transporter), mer	8.22	4.03
18	119590731	hCG2036623, isoform CRA_a [Homo sapiens]	2.04	0.74
19	119589968	ATP-binding cassette, sub-family A (ABC1), member 7, isoform CRA	2.25	1.46
20	115529031	SCNN1D protein [Homo sapiens]	2.84	6.61
21	115527741	NOX5 protein [Homo sapiens]	6.46	6.54
22	588282802	zona pellucida sperm-binding protein 2 isoform 2 preproprotein [Ho	2.54	3.40
23	125858928	DLEC1 protein [Homo sapiens]	3.28	1.26
24	20530135	growth differentiation factor 3A [Homo sapiens]	2.00	5.79
25	6648144	neurexin III [Homo sapiens]	1.52	2.85
26	208606797	unnamed protein product [Homo sapiens]	3.15	2.83
27	193786834	unnamed protein product [Homo sapiens]	2.06	2.12
28	152061071	LIN28B protein [Homo sapiens]	7.28	6.61
29	124504581	SAMD13 protein [Homo sapiens]	2.59	19.05
30	18676915	unnamed protein product [Homo sapiens]	4.07	2.34
31	16554278	unnamed protein product [Homo sapiens]	4.76	4.85
32	16553682	unnamed protein product [Homo sapiens]	6.19	5.20
33	10437815	unnamed protein product [Homo sapiens]	1.64	2.16
34	557357735	adenosine 3'-phospho 5'-phosphosulfate transporter 1 isoform b [Hc	2.86	3.75
35	544186123	dimethylaniline monooxygenase [N-oxide-forming] 1 isoform a [Hon	1.89	1.31
36	526118181	surfeit locus protein 4 isoform 6 [Homo sapiens]	4.35	8.55
37	119621383	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation	5.59	19.86
38	119621343	Rho-associated, coiled-coil containing protein kinase 2, isoform CRA	1.81	1.27
39	119621160	hCG22390, isoform CRA_a [Homo sapiens]	4.01	5.20
40	119620547	spectrin, beta, non-erythrocytic 1, isoform CRA_e [Homo sapiens]	4.49	8.31
41	119620491	polyribonucleotide nucleotidyltransferase 1, isoform CRA_a [Homo s	8.12	2.00
42	119620455	hCG1783369 [Homo sapiens]	2.47	16.92
43	119620409	AHA1, activator of heat shock 90kDa protein ATPase homolog 2 (ye	24.36	14.29
44	119577251	seryl-tRNA synthetase 2, isoform CRA_c [Homo sapiens]	1.68	2.44
45	119577203	mitogen-activated protein kinase kinase kinase kinase 1, isoform CR	369.83	11.45
46	119632275	hCG1793821, isoform CRA_a [Homo sapiens]	1.68	7.48
47	119632132	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B, isoform CRA_c	4.53	6.03
48	119632103	hCG1646178, isoform CRA_a, partial [Homo sapiens]	1.56	4.62
49	119631973	hCG1647962, isoform CRA_a, partial [Homo sapiens]	2.30	6.00
50	119631874	hCG2007338, isoform CRA_b, partial [Homo sapiens]	3.11	4.03
51	119631669	hCG15219, isoform CRA_a, partial [Homo sapiens]	2.08	21.24
52	119631525	chimerin (chimaerin) 1, isoform CRA_d [Homo sapiens]	7.06	6.56
53	119631421	titin, isoform CRA_c [Homo sapiens]	15.86	0.79
54	119631077	TBC1 domain family, member 20, isoform CRA_c [Homo sapiens]	2.27	7.96
55	119630700	hCG2038614, partial [Homo sapiens]	1.54	6.03
56	119630031	hCG1812841, isoform CRA_a, partial [Homo sapiens]	2.59	10.00
57	119630026	Down syndrome cell adhesion molecule, isoform CRA_b, partial [Ho	3.80	1.15
58	119629967	ubiquitin associated and SH3 domain containing, A, isoform CRA_c,	4.95	8.20
59	119629319	hCG2041314, partial [Homo sapiens]	2.33	14.39
60	119629073	hCG1644029, partial [Homo sapiens]	2.01	6.49

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2	119628926	hCG32806, isoform CRA_e [Homo sapiens]	2.05	0.55
3	119628728	spastic ataxia of Charlevoix-Saguenay (sacsin), partial [Homo sapiens]	4.85	4.04
4	119628614	hCG1791068, isoform CRA_b, partial [Homo sapiens]	2.16	2.54
5	119628610	hCG18315, isoform CRA_c [Homo sapiens]	2.57	8.26
6	119628541	iroquois homeobox protein 2, partial [Homo sapiens]	2.00	3.63
7	119628538	hCG1989689, partial [Homo sapiens]	2.12	13.08
8	119628507	hCG1990016 [Homo sapiens]	14.00	9.09
9	119628379	chaperonin containing TCP1, subunit 6A (zeta 1), isoform CRA_b [Homo sapiens]	2.26	7.08
10	119627737	hCG2041179, partial [Homo sapiens]	2.59	36.14
11	119627245	hCG1643513 [Homo sapiens]	2.44	2.30
12	119625915	homeodomain-only protein, isoform CRA_i, partial [Homo sapiens]	4.68	32.20
13	119625687	hCG2036595 [Homo sapiens]	1.61	1.48
14	119625447	OTU domain containing 4, isoform CRA_a [Homo sapiens]	5.79	3.63
15	119625403	mab-21-like 2 (C. elegans), isoform CRA_a [Homo sapiens]	3.03	5.46
16	119625162	hCG2041080, partial [Homo sapiens]	9.98	14.12
17	119624765	polycystic kidney and hepatic disease 1 (autosomal recessive), isoform CRA_b [Homo sapiens]	2.53	0.62
18	119623591	olfactory receptor, family 5, subfamily U, member 1 [Homo sapiens]	2.53	8.45
19	119623229	hCG1989619, isoform CRA_a [Homo sapiens]	2.57	17.53
20	119623210	protocadherin 19, isoform CRA_b [Homo sapiens]	11.48	1.31
21	119623206	hCG18775, isoform CRA_b, partial [Homo sapiens]	2.27	3.85
22	119622706	proprotein convertase subtilisin/kexin type 6, isoform CRA_a [Homo sapiens]	2.03	2.18
23	119622691	hCG2045702, partial [Homo sapiens]	2.00	13.46
24	119622550	hCG2041657, partial [Homo sapiens]	18.67	9.52
25	119622113	hCG1644617 [Homo sapiens]	2.00	18.95
26	119622000	RAB31, member RAS oncogene family, isoform CRA_a [Homo sapiens]	2.64	10.47
27	119619806	hCG39240, isoform CRA_b [Homo sapiens]	4.76	13.89
28	119619572	hCG2005369, partial [Homo sapiens]	2.52	16.87
29	119619444	hCG2036884 [Homo sapiens]	2.74	12.06
30	119619407	hypothetical protein MGC4825, isoform CRA_a [Homo sapiens]	3.32	14.04
31	119619137	hCG1981372, isoform CRA_a [Homo sapiens]	2.62	14.74
32	119618553	coiled-coil domain containing 60, isoform CRA_a [Homo sapiens]	2.53	19.55
33	119618310	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2, isoform CRA_b [Homo sapiens]	2.42	1.49
34	119618067	hCG1815253 [Homo sapiens]	2.06	20.34
35	119618010	apoptotic peptidase activating factor, isoform CRA_b, partial [Homo sapiens]	5.59	2.06
36	119617982	hCG2042157, partial [Homo sapiens]	2.11	2.96
37	119617754	PRKC, apoptosis, WT1, regulator, isoform CRA_c [Homo sapiens]	2.59	43.75
38	119617334	ubiquitin specific peptidase 52, isoform CRA_a [Homo sapiens]	5.22	1.42
39	119617311	myosin, light polypeptide 6, alkali, smooth muscle and non-muscle, isoform CRA_b [Homo sapiens]	2.33	15.53
40	119617203	hCG21937, isoform CRA_b [Homo sapiens]	9.18	6.01
41	119616788	hCG2040433 [Homo sapiens]	2.01	4.84
42	119616523	C-type lectin domain family 2, member D, isoform CRA_b [Homo sapiens]	6.63	12.39
43	119616286	single-stranded DNA binding protein 2, isoform CRA_d [Homo sapiens]	2.17	13.54
44	119616244	PAP associated domain containing 4, isoform CRA_b, partial [Homo sapiens]	7.29	2.73
45	119616019	hCG1979897, isoform CRA_b [Homo sapiens]	2.03	8.16
46	119616018	hCG1979897, isoform CRA_a, partial [Homo sapiens]	8.28	12.12
47	119615473	ribosomal protein L11, isoform CRA_a [Homo sapiens]	2.26	5.26
48	119615116	tubulin tyrosine ligase-like family, member 6, isoform CRA_b [Homo sapiens]	3.32	1.25
49	119614967	mbt domain containing 1, isoform CRA_b, partial [Homo sapiens]	1.70	8.00
50	119614760	EF-hand calcium binding domain 3, partial [Homo sapiens]	2.51	2.90
51	119614392	phosphodiesterase 1C, calmodulin-dependent 70kDa, isoform CRA_b [Homo sapiens]	5.31	5.57
52	119613593	inter-alpha (globulin) inhibitor H5-like, isoform CRA_b, partial [Homo sapiens]	2.59	5.16
53	119612728	hCG1787519 [Homo sapiens]	1.62	7.62
54	119612617	PTK2 protein tyrosine kinase 2, isoform CRA_b [Homo sapiens]	5.38	2.27
55	119612447	F-box protein 32, isoform CRA_b, partial [Homo sapiens]	3.07	11.81
56	119612325	eukaryotic translation initiation factor 3, subunit 6 48kDa, isoform CRA_b [Homo sapiens]	2.09	2.78
57	119611721	kinesin family member 14, isoform CRA_a [Homo sapiens]	1.53	0.51
58	119611588	chromosome 1 open reading frame 22, isoform CRA_e [Homo sapiens]	32.39	9.90
59	119611381	hCG2040409 [Homo sapiens]	6.41	20.36
60	119611364	chromosome 1 open reading frame 155, isoform CRA_b, partial [Homo sapiens]	2.70	16.20



1	119611340	chromosome 1 open reading frame 9, isoform CRA_d [Homo sapien	1.61	0.57
2	119610429	hCG57025, isoform CRA_c [Homo sapiens]	2.49	1.63
3	574270145	alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1 isoform	4.76	2.99
4	119609527	hCG1641439 [Homo sapiens]	7.05	10.49
5	119608942	hCG2041489, partial [Homo sapiens]	5.01	3.98
6	119608652	EGF-like-domain, multiple 7, isoform CRA_a, partial [Homo sapiens]	2.02	8.60
7	119608609	hCG2040469 [Homo sapiens]	2.61	13.30
8	119608259	nucleoporin 188kDa, isoform CRA_d, partial [Homo sapiens]	2.62	1.83
9	119607432	junctophilin 1, isoform CRA_a, partial [Homo sapiens]	1.52	2.43
10	119607075	hCG2042370, partial [Homo sapiens]	2.09	15.09
11	119606579	hCG21545, isoform CRA_b [Homo sapiens]	16.79	1.98
12	119606543	armadillo repeat containing 3, isoform CRA_a [Homo sapiens]	5.11	2.64
13	119606115	CTF18, chromosome transmission fidelity factor 18 homolog (S. cere	2.62	6.09
14	119606064	hypothetical protein LOC283951, isoform CRA_b [Homo sapiens]	2.00	5.06
15	119605696	hCG1658583, isoform CRA_b, partial [Homo sapiens]	4.81	1.86
16	119605531	hCG2042874, isoform CRA_b, partial [Homo sapiens]	2.09	3.04
17	119605415	solute carrier family 34 (sodium phosphate), member 1, isoform CR	2.11	3.72
18	119604587	dedicator of cytokinesis 6, isoform CRA_c, partial [Homo sapiens]	3.37	0.60
19	119604409	hCG21930, isoform CRA_f [Homo sapiens]	3.03	0.16
20	119604207	coiled-coil-helix-coiled-coil-helix domain containing 3, isoform CRA_l	2.51	8.70
21	119602547	hCG1993037, isoform CRA_h [Homo sapiens]	4.26	2.32
22	119602406	hCG2038924, partial [Homo sapiens]	3.56	6.98
23	119602251	protein phosphatase 1, regulatory (inhibitor) subunit 13B, isoform C	2.02	1.46
24	119602146	hCG2036999 [Homo sapiens]	278.74	18.18
25	119601675	KIAA1737, isoform CRA_a [Homo sapiens]	4.66	8.31
26	119601482	D4, zinc and double PHD fingers, family 3, isoform CRA_a [Homo sa	1.51	2.59
27	119601262	hCG2036758 [Homo sapiens]	6.81	18.42
28	119601239	hCG1651220 [Homo sapiens]	1.51	6.02
29	119601150	hCG22233 [Homo sapiens]	2.10	6.07
30	119600904	hCG2026504, partial [Homo sapiens]	6.44	11.83
31	119600833	hCG2044005 [Homo sapiens]	2.19	8.30
32	119600697	chromosome 17 open reading frame 42, isoform CRA_b [Homo sapi	2.22	7.60
33	119600622	amiloride-sensitive cation channel 1, neuronal (degenerin) [Homo sa	3.29	2.83
34	119600566	hCG1989262, partial [Homo sapiens]	1.63	5.98
35	119599993	hCG2022736, isoform CRA_a [Homo sapiens]	3.22	8.21
36	119599875	poly (ADP-ribose) polymerase family, member 14, isoform CRA_a [H	1.53	0.91
37	119599768	hCG1798119 [Homo sapiens]	1.66	1.60
38	119599748	G protein-coupled receptor 175, isoform CRA_c [Homo sapiens]	2.50	4.04
39	119599587	hCG2038396, partial [Homo sapiens]	2.01	21.51
40	119598646	chordin, isoform CRA_b, partial [Homo sapiens]	1.55	3.33
41	119598639	KIAA0804, isoform CRA_a [Homo sapiens]	5.55	7.19
42	119598573	hCG1792419, isoform CRA_b, partial [Homo sapiens]	2.38	3.02
43	119597481	fatty acid binding protein 1, liver, isoform CRA_a [Homo sapiens]	2.57	21.74
44	119597386	hCG2045330 [Homo sapiens]	2.75	80.00
45	119597096	SMAD specific E3 ubiquitin protein ligase 1, isoform CRA_a [Homo s	2.53	3.44
46	119596610	centrosomal protein 250kDa, isoform CRA_a [Homo sapiens]	1.57	0.33
47	119596606	ERGIC and golgi 3, isoform CRA_b [Homo sapiens]	2.37	6.28
48	119596419	hCG2019858, isoform CRA_a, partial [Homo sapiens]	2.60	3.76
49	119595939	hCG2043550 [Homo sapiens]	7.47	14.01
50	119595726	hCG2045320 [Homo sapiens]	1.55	7.79
51	119595045	phosphatidylinositol transfer protein, membrane-associated 1, isofor	2.23	3.23
52	119594973	RCE1 homolog, prenyl protein peptidase (S. cerevisiae), isoform CR	2.04	6.12
53	119594826	hCG23294, isoform CRA_b, partial [Homo sapiens]	2.05	1.06
54	119594502	TAF6-like RNA polymerase II, p300/CBP-associated factor (PCAF)-as	7.13	2.16
55	119593011	tripartite motif-containing 28, isoform CRA_a [Homo sapiens]	3.84	2.71
56	119592825	NACHT, leucine rich repeat and PYD containing 13, isoform CRA_a [	9.50	1.93
57	119592517	zinc finger protein 160, isoform CRA_b [Homo sapiens]	2.84	2.43
58	119592486	hCG2040446 [Homo sapiens]	2.08	15.57
59	119591468	hCG2012694, isoform CRA_a [Homo sapiens]	4.24	11.59

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2	119590969	X-ray repair complementing defective repair in Chinese hamster cell	7.19	4.35
3	119590934	5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/I	5.02	4.61
4	119590616	hCG2038227, partial [Homo sapiens]	2.02	8.70
5	119589501	KH-type splicing regulatory protein (FUSE binding protein 2), isoform	2.16	4.35
6	119589376	hCG2003956 [Homo sapiens]	2.09	15.54
7	119588908	BTB (POZ) domain containing 10, isoform CRA_e, partial [Homo sap	2.07	8.84
8	119588859	hCG1992264, isoform CRA_b [Homo sapiens]	2.03	1.55
9	119588717	hCG2045250 [Homo sapiens]	2.14	45.10
10	119588714	leucine zipper protein 2, partial [Homo sapiens]	1.53	7.14
11	119587781	hCG2043599, isoform CRA_a [Homo sapiens]	3.68	100.00
12	119587173	hCG1980844, isoform CRA_e, partial [Homo sapiens]	1.70	1.19
13	119587011	hCG1654128, partial [Homo sapiens]	5.38	1.39
14	119586299	hCG2033479, isoform CRA_e [Homo sapiens]	2.72	10.26
15	119585701	choline dehydrogenase, isoform CRA_a [Homo sapiens]	2.08	3.37
16	119585620	dynein, axonemal, heavy polypeptide 1, isoform CRA_b [Homo sapi	4.85	0.70
17	119585568	G protein-coupled receptor 62 [Homo sapiens]	11.41	2.45
18	119585538	dedicator of cytokinesis 3, isoform CRA_a [Homo sapiens]	3.87	0.97
19	119585025	hCG2042883, isoform CRA_c [Homo sapiens]	2.08	4.25
20	119584932	solute carrier family 22 (organic cation transporter), member 13, iso	1.53	1.32
21	119584319	inositol 1,4,5-triphosphate receptor, type 1, isoform CRA_e [Homo s	3.79	0.63
22	119584255	deleted in liver cancer 1, isoform CRA_a [Homo sapiens]	2.01	3.46
23	119584178	hCG1656107 [Homo sapiens]	1.59	4.31
24	119583954	epoxide hydrolase 2, cytoplasmic, isoform CRA_d [Homo sapiens]	2.17	6.33
25	119583929	hCG2042278, partial [Homo sapiens]	3.18	13.04
26	119583683	hCG1785549, isoform CRA_a [Homo sapiens]	2.06	40.74
27	119583508	phorbol-12-myristate-13-acetate-induced protein 1, isoform CRA_a [	3.28	12.33
28	119583478	neural precursor cell expressed, developmentally down-regulated 4-	3.57	1.73
29	119583303	hCG1793638, partial [Homo sapiens]	2.70	9.82
30	119583128	hCG1817457 [Homo sapiens]	4.29	24.53
31	119582828	basonuclin 1, partial [Homo sapiens]	2.70	3.25
32	119582526	catenin (cadherin-associated protein), alpha 1, 102kDa, isoform CRA	3.84	1.78
33	119582240	hCG2045132 [Homo sapiens]	1.52	14.63
34	119582176	casein kinase 1, alpha 1, isoform CRA_f [Homo sapiens]	2.13	8.25
35	119581798	hCG2045156, partial [Homo sapiens]	3.15	7.46
36	119581314	ribosomal protein L27, isoform CRA_b [Homo sapiens]	2.21	11.25
37	119581311	RUN domain containing 1, isoform CRA_a [Homo sapiens]	2.43	4.18
38	119581212	RAB5C, member RAS oncogene family, isoform CRA_b, partial [Hom	2.29	11.52
39	119580816	l(3)mbt-like 2 (Drosophila), isoform CRA_c [Homo sapiens]	2.27	3.69
40	119580774	trinucleotide repeat containing 6B, isoform CRA_c [Homo sapiens]	3.60	2.57
41	119580589	TRIO and F-actin binding protein, isoform CRA_e [Homo sapiens]	6.53	2.72
42	119580349	ring finger protein 185, isoform CRA_c, partial [Homo sapiens]	2.32	16.52
43	119580109	myosin XVIIIIB, isoform CRA_c [Homo sapiens]	1.51	0.58
44	119579820	hCG1789581, isoform CRA_b [Homo sapiens]	64.45	16.67
45	119579789	hCG1643051, isoform CRA_b, partial [Homo sapiens]	2.61	7.46
46	119579731	hCG29146, partial [Homo sapiens]	1.60	1.27
47	119579661	hCG1748768, isoform CRA_b, partial [Homo sapiens]	10.51	8.44
48	119579548	hCG201489, isoform CRA_b [Homo sapiens]	1.57	9.46
49	119579339	hCG1654432 [Homo sapiens]	2.05	13.79
50	119578438	myeloid/lymphoid or mixed-lineage leukemia 2, isoform CRA_a [Hor	15.94	0.99
51	119578198	hCG1773636 [Homo sapiens]	2.57	16.76
52	119578149	hCG1817588 [Homo sapiens]	2.60	26.42
53	119577954	X antigen family, member 5, isoform CRA_a, partial [Homo sapiens]	2.09	11.90
54	119576911	DEAD (Asp-Glu-Ala-Asp) box polypeptide 20, isoform CRA_a [Homo	2.00	2.08
55	119576743	hCG2045076 [Homo sapiens]	2.03	22.22
56	119576684	tumor necrosis factor receptor superfamily, member 4, isoform CRA	2.21	6.19
57	119576538	hCG2045069 [Homo sapiens]	2.10	16.47
58	119576503	pantothenate kinase 4, isoform CRA_c [Homo sapiens]	2.03	10.24
59	119576425	hCG2006035 [Homo sapiens]	2.59	27.50
60	119576063	lethal giant larvae homolog 1 (Drosophila), isoform CRA_c [Homo sa	4.59	1.19

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2	119575615	hCG15865, isoform CRA_a, partial [Homo sapiens]	3.49	2.99
3	119575351	hypothetical protein MGC33648, isoform CRA_a [Homo sapiens]	2.02	22.22
4	119575327	interleukin 31 receptor A, isoform CRA_c [Homo sapiens]	4.25	4.43
5	119575183	zinc finger protein 140 (clone pHZ-39), isoform CRA_c, partial [Homo sapiens]	2.17	17.33
6	119575171	hCG1724266 [Homo sapiens]	2.62	19.86
7	119574613	AT rich interactive domain 5B (MRF1-like), isoform CRA_c [Homo sapiens]	4.15	1.23
8	119574016	hCG2003971, isoform CRA_a, partial [Homo sapiens]	4.10	10.53
9	119573663	solute carrier family 27 (fatty acid transporter), member 3, isoform CRA_c [Homo sapiens]	2.07	18.26
10	119573320	G patch domain containing 4, isoform CRA_a [Homo sapiens]	2.05	3.28
11	119572988	succinate dehydrogenase complex, subunit C, integral membrane protein [Homo sapiens]	3.06	12.50
12	119572861	hypothetical protein FLJ32658, isoform CRA_a [Homo sapiens]	2.26	7.39
13	119572748	ribosomal protein L18, isoform CRA_e [Homo sapiens]	6.46	22.06
14	119572729	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 1, isoform CRA_c [Homo sapiens]	4.63	11.11
15	119572383	Tu translation elongation factor, mitochondrial, isoform CRA_b [Homo sapiens]	2.31	4.30
16	119571874	myomesin (M-protein) 2, 165kDa, isoform CRA_b [Homo sapiens]	2.07	0.81
17	119571612	carboxypeptidase D, isoform CRA_a [Homo sapiens]	2.10	1.11
18	119571365	hCG2038550, partial [Homo sapiens]	2.01	3.57
19	119571209	hCG1755149, isoform CRA_b [Homo sapiens]	2.56	16.11
20	119571047	protein tyrosine phosphatase, non-receptor type 20B [Homo sapiens]	1.58	3.91
21	119570910	otoancorin, isoform CRA_b, partial [Homo sapiens]	2.14	2.70
22	119570469	exocyst complex component 6, isoform CRA_c [Homo sapiens]	4.05	1.98
23	119570260	hCG1642531 [Homo sapiens]	1.68	7.55
24	119569824	hCG2036773, isoform CRA_a [Homo sapiens]	4.31	5.13
25	119569625	hCG1641490, partial [Homo sapiens]	1.61	3.55
26	119569496	hCG2041837, partial [Homo sapiens]	2.02	20.27
27	119569485	solute carrier organic anion transporter family, member 4C1, isoform CRA_c [Homo sapiens]	1.57	1.81
28	119569417	calcium/calmodulin-dependent protein kinase IV, isoform CRA_a [Homo sapiens]	3.73	5.07
29	119569383	hCG2039564, isoform CRA_b [Homo sapiens]	2.00	24.36
30	119569230	lamin B1, isoform CRA_a [Homo sapiens]	17.42	6.69
31	119569069	hCG2040303, partial [Homo sapiens]	4.63	10.71
32	119568896	fucosyltransferase 9 (alpha (1,3) fucosyltransferase), isoform CRA_a [Homo sapiens]	2.74	3.06
33	119568499	R-spondin 3 homolog (Xenopus laevis), isoform CRA_a [Homo sapiens]	2.10	4.74
34	119568002	t-complex 1, isoform CRA_b [Homo sapiens]	2.64	7.10
35	133777549	Dystrophin related protein 2 [Homo sapiens]	3.58	2.10
36	84627501	UNC13B protein [Homo sapiens]	2.51	2.26
37	38541875	BRDT protein, partial [Homo sapiens]	3.81	3.23
38	3108019	NFI-X_HUMAN NUCLEAR FACTOR 1/X (NFI-X) [Homo sapiens]	2.00	8.06
39	184556	insulin-degrading enzyme [Homo sapiens]	2.03	1.96
40	3831611	olfactory receptor [Homo sapiens]	2.50	8.87
41	34596117	central open reading frame [Homo sapiens]	1.65	6.67
42	221046346	unnamed protein product [Homo sapiens]	4.20	10.33
43	221045894	unnamed protein product [Homo sapiens]	2.19	8.06
44	221045112	unnamed protein product [Homo sapiens]	2.44	2.03
45	221044806	unnamed protein product [Homo sapiens]	7.14	6.00
46	221044746	unnamed protein product [Homo sapiens]	2.59	5.56
47	221044626	unnamed protein product [Homo sapiens]	2.20	7.75
48	221044340	unnamed protein product [Homo sapiens]	2.11	4.16
49	221042302	unnamed protein product [Homo sapiens]	2.05	2.30
50	221042248	unnamed protein product [Homo sapiens]	11.33	6.08
51	221041662	unnamed protein product [Homo sapiens]	3.86	4.97
52	221041614	unnamed protein product [Homo sapiens]	2.58	4.13
53	221040986	unnamed protein product [Homo sapiens]	6.48	2.19
54	221040152	unnamed protein product [Homo sapiens]	1.50	3.23
55	221040022	unnamed protein product [Homo sapiens]	2.05	1.79
56	34365000	hypothetical protein [Homo sapiens]	2.08	6.02
57	31874064	hypothetical protein [Homo sapiens]	5.39	4.86
58	31874003	hypothetical protein [Homo sapiens]	9.31	1.45
59	30722358	hypothetical protein [Homo sapiens]	6.00	1.46
60	30268309	hypothetical protein [Homo sapiens]	3.19	1.09

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2	42406435	VPS13D-2A protein [Homo sapiens]	3.57	0.80
3	194390268	unnamed protein product [Homo sapiens]	2.01	4.94
4	194389166	unnamed protein product [Homo sapiens]	3.87	3.19
5	194384684	unnamed protein product [Homo sapiens]	4.39	6.92
6	194384094	unnamed protein product [Homo sapiens]	2.57	3.10
7	194384024	unnamed protein product [Homo sapiens]	3.05	4.74
8	194382090	unnamed protein product [Homo sapiens]	3.69	5.07
9	194378708	unnamed protein product [Homo sapiens]	2.04	2.02
10	194375834	unnamed protein product [Homo sapiens]	2.12	1.23
11	194375079	unnamed protein product [Homo sapiens]	2.05	2.44
12	194387756	unnamed protein product [Homo sapiens]	2.15	14.66
13	194389828	unnamed protein product [Homo sapiens]	6.86	6.13
14	194389800	unnamed protein product [Homo sapiens]	4.35	3.59
15	194387450	unnamed protein product [Homo sapiens]	1.59	1.29
16	194387346	unnamed protein product [Homo sapiens]	2.76	4.57
17	194386918	unnamed protein product [Homo sapiens]	4.14	4.35
18	194386686	unnamed protein product [Homo sapiens]	1.74	1.99
19	194385806	unnamed protein product [Homo sapiens]	7.92	2.04
20	194385786	unnamed protein product [Homo sapiens]	4.64	17.82
21	194385736	unnamed protein product [Homo sapiens]	2.16	1.33
22	194385632	unnamed protein product [Homo sapiens]	7.51	7.75
23	194385420	unnamed protein product [Homo sapiens]	39.84	38.96
24	194384468	unnamed protein product [Homo sapiens]	111.97	36.75
25	194383918	unnamed protein product [Homo sapiens]	10.79	1.95
26	194381558	unnamed protein product [Homo sapiens]	3.16	1.54
27	194380558	unnamed protein product [Homo sapiens]	2.52	2.57
28	194379872	unnamed protein product [Homo sapiens]	9.43	4.03
29	194377340	unnamed protein product [Homo sapiens]	4.25	1.93
30	194376800	unnamed protein product [Homo sapiens]	2.05	3.70
31	194375468	unnamed protein product [Homo sapiens]	8.65	3.17
32	194373809	unnamed protein product [Homo sapiens]	2.33	2.13
33	194373719	unnamed protein product [Homo sapiens]	4.56	6.42
34	577019450	glucose-6-phosphate isomerase isoform 4 [Homo sapiens]	6.48	2.45
35	194373539	unnamed protein product [Homo sapiens]	8.45	8.92
36	194373535	unnamed protein product [Homo sapiens]	2.53	5.01
37	193787134	unnamed protein product [Homo sapiens]	10.95	6.77
38	193783700	unnamed protein product [Homo sapiens]	5.15	1.37
39	193787783	unnamed protein product [Homo sapiens]	2.61	11.02
40	193787582	unnamed protein product [Homo sapiens]	17.91	13.69
41	193786597	unnamed protein product [Homo sapiens]	3.77	6.25
42	193786389	unnamed protein product [Homo sapiens]	2.57	3.43
43	193785905	unnamed protein product [Homo sapiens]	4.16	11.03
44	193785471	unnamed protein product [Homo sapiens]	9.78	5.24
45	193785014	unnamed protein product [Homo sapiens]	2.27	6.98
46	193785647	unnamed protein product [Homo sapiens]	4.07	1.00
47	189066668	unnamed protein product [Homo sapiens]	9.18	5.68
48	189054902	unnamed protein product [Homo sapiens]	2.54	15.92
49	158261765	unnamed protein product [Homo sapiens]	5.75	1.68
50	158260377	unnamed protein product [Homo sapiens]	4.65	9.26
51	158260107	unnamed protein product [Homo sapiens]	5.34	3.41
52	158258340	unnamed protein product [Homo sapiens]	5.25	1.22
53	158256976	unnamed protein product [Homo sapiens]	2.15	2.90
54	158255298	unnamed protein product [Homo sapiens]	1.52	3.22
55	22760973	unnamed protein product [Homo sapiens]	3.12	3.36
56	21757363	unnamed protein product [Homo sapiens]	4.56	2.32
57	21755136	unnamed protein product [Homo sapiens]	6.29	10.49
58	21753522	unnamed protein product [Homo sapiens]	2.89	16.67
59	21752832	unnamed protein product [Homo sapiens]	3.61	4.83
60	21752165	unnamed protein product [Homo sapiens]	2.01	4.89

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2	21752113	unnamed protein product [Homo sapiens]	4.29	3.51
3	21751586	unnamed protein product [Homo sapiens]	13.06	2.87
4	21750841	unnamed protein product [Homo sapiens]	6.07	2.60
5	21749605	unnamed protein product [Homo sapiens]	1.95	1.93
6	16551959	unnamed protein product [Homo sapiens]	4.25	6.38
7	16551483	unnamed protein product [Homo sapiens]	23.11	3.85
8	16549875	unnamed protein product [Homo sapiens]	2.51	2.88
9	16549375	unnamed protein product [Homo sapiens]	4.11	7.14
10	10435134	unnamed protein product [Homo sapiens]	2.67	6.73
11	10434667	unnamed protein product [Homo sapiens]	9.06	3.86
12	10433360	unnamed protein product [Homo sapiens]	17.59	4.37
13	7023630	unnamed protein product [Homo sapiens]	4.10	5.36
14	7022948	unnamed protein product [Homo sapiens]	2.92	6.05
15	7022861	unnamed protein product [Homo sapiens]	5.11	4.10
16	18676688	FLJ00243 protein [Homo sapiens]	2.70	4.57
17	10440389	FLJ00030 protein [Homo sapiens]	24.07	7.63
18	76879741	putative protein product of Nbla00650 [Homo sapiens]	5.89	2.89
19	68533135	ABCA4 variant protein [Homo sapiens]	5.61	1.04
20	34364852	hypothetical protein [Homo sapiens]	2.17	3.22
21	559709	KIAA0075 [Homo sapiens]	2.65	8.05
22	425906070	RecName: Full=Coiled-coil domain-containing protein 177; AltName:	5.51	3.54
23	30749678	Chain A, Tr Receptor Mutations Conferring Hormone Resistance And	12.92	7.98
24	291463381	Chain A, Crystal Structure Of Human4-1bb Ligand Ectodomain	1.52	3.59
25	158254191	GCN1 general control of amino-acid synthesis 1-like 1 (yeast) [Homo	4.27	1.20
26	156230634	ANKRD18A protein [Homo sapiens]	10.77	1.51
27	152012995	ZNF536 protein [Homo sapiens]	3.30	1.08
28	152012538	CASP8AP2 protein [Homo sapiens]	5.87	2.02
29	148745671	MAN2A1 protein [Homo sapiens]	1.72	0.79
30	73909096	LRRC4B protein, partial [Homo sapiens]	1.53	4.35
31	47123516	C10orf118 protein, partial [Homo sapiens]	4.95	4.59
32	46249807	PRDM4 protein [Homo sapiens]	1.77	2.22
33	38174254	GOLGA3 protein, partial [Homo sapiens]	9.04	2.97
34	34783093	SGOL1 protein, partial [Homo sapiens]	3.63	4.54
35	29792202	ARFGEF2 protein, partial [Homo sapiens]	4.30	2.88
36	28839788	BCLAF1 protein, partial [Homo sapiens]	5.05	3.19
37	28374332	COBL protein, partial [Homo sapiens]	5.37	2.62
38	26251962	ARHGEF10 protein [Homo sapiens]	4.69	2.89
39	26251781	TEX14 protein [Homo sapiens]	3.29	1.00
40	17389922	SLC16A10 protein [Homo sapiens]	4.24	4.98
41	17389503	CHORDC1 protein [Homo sapiens]	4.83	10.34
42	17389198	KIAA1524 protein, partial [Homo sapiens]	2.09	2.46
43	15341851	RHBDL2 protein [Homo sapiens]	8.53	16.53
44	14250440	EPHA2 protein, partial [Homo sapiens]	2.37	7.51
45	12652757	XPO5 protein [Homo sapiens]	2.63	9.29
46	882290	immunoglobulin light chain variable region, partial [Homo sapiens]	8.39	17.76
47	553168	acrosin, partial [Homo sapiens]	2.55	18.52
48	386758	GRP78 precursor, partial [Homo sapiens]	28.94	19.75
49	1297330	DOC-2 [Homo sapiens]	2.11	1.04
50	235590	lysosomal acid beta-galactosidase [Homo sapiens]	1.63	46.15
51	40067573	immunoglobulin heavy chain variable region [Homo sapiens]	9.34	31.63
52	15430703	testis specific serine/threonine kinase 2 [Homo sapiens]	2.07	2.79
53	4545137	G protein-coupled receptor [Homo sapiens]	17.06	4.70
54	2394178	P-glycoprotein [Homo sapiens]	8.10	89.19
55	2282576	HsGCN1 [Homo sapiens]	4.75	2.02
56	62988667	unknown [Homo sapiens]	12.90	4.26
57	33150792	ATP-dependent RNA helicase [Homo sapiens]	2.01	2.86
58	15293591	olfactory receptor [Homo sapiens]	4.04	7.34
59	40362722	inosine monophosphate dehydrogenase type II [Homo sapiens]	1.84	10.61
60	12620919	prosome P27K protein [Homo sapiens]	3.03	22.41



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2	45643115	hypothetical protein [Homo sapiens]	1.56	2.16
3	211825727	FAM62B protein [Homo sapiens]	2.44	3.07
4	193785898	unnamed protein product [Homo sapiens]	2.12	2.75
5	193785859	unnamed protein product [Homo sapiens]	2.17	2.78
6	193785127	unnamed protein product [Homo sapiens]	4.08	4.23
7	47682880	C2orf67 protein [Homo sapiens]	6.25	3.51
8	189054612	unnamed protein product [Homo sapiens]	3.03	1.60
9	189054269	unnamed protein product [Homo sapiens]	5.15	5.91
10	34536208	unnamed protein product [Homo sapiens]	2.86	11.41
11	34536075	unnamed protein product [Homo sapiens]	7.26	3.77
12	34534922	unnamed protein product [Homo sapiens]	7.00	1.04
13	34534815	unnamed protein product [Homo sapiens]	6.11	3.99
14	34533483	unnamed protein product [Homo sapiens]	3.53	5.11
15	34533179	unnamed protein product [Homo sapiens]	2.74	14.14
16	34532249	unnamed protein product [Homo sapiens]	3.25	0.63
17	34532000	unnamed protein product [Homo sapiens]	3.97	2.37
18	116283583	UGCGL2 protein [Homo sapiens]	1.63	2.77
19	91979518	immunoglobulin heavy chain variable region [Homo sapiens]	2.13	23.26
20	34849883	TPA_exp: spectrin-like protein of the nuclear envelope and Golgi [H	22.37	1.23
21	312050	myosin I homologue [Homo sapiens]	2.53	2.96
22	32335	HMG2B [Homo sapiens]	2.11	5.91
23	24899200	KIAA2018 protein [Homo sapiens]	4.06	2.79
24	18916861	KIAA1976 protein [Homo sapiens]	4.11	6.27
25	14017861	KIAA1822 protein [Homo sapiens]	3.36	1.88
26	14017851	KIAA1817 protein [Homo sapiens]	2.67	2.11
27	10047341	KIAA1632 protein [Homo sapiens]	2.70	1.99
28	10047267	KIAA1596 protein [Homo sapiens]	3.69	1.04
29	7959259	KIAA1499 protein [Homo sapiens]	3.20	2.12
30	12698023	KIAA1739 protein [Homo sapiens]	1.52	0.93
31	557804845	Chain B, Crystal Structure Of Eif4aiii-cwc22 Complex	2.27	2.06
32	157829395	ubiquitously transcribed tetratricopeptide repeat protein Y-linked tra	6.07	23.02
33	444739075	alternative protein KIAA1704 [Homo sapiens]	2.71	33.33
34	444738631	alternative protein SCN3A [Homo sapiens]	4.17	22.08
35	444738587	alternative protein POLR3G [Homo sapiens]	2.51	30.86
36	444738203	alternative protein HRC [Homo sapiens]	2.03	2.62
37	444737907	alternative protein TCHHL1 [Homo sapiens]	2.02	12.23
38	444733343	alternative protein KHDRBS2 [Homo sapiens]	2.03	24.44
39	538260951	Chain B, Crystal Structure Of A0-domain Of P5 From H. Sapiens	3.20	12.07
40	537368331	immunoglobulin heavy chain variable region, partial [Homo sapiens]	2.41	22.22
41	537368226	immunoglobulin heavy chain variable region, partial [Homo sapiens]	2.95	15.45
42	428698207	Chain G, Dcnl Complex With N-terminally Acetylated Nedd8 E2 Pepti	3.14	28.00
43	161172286	Chain V, Vti1b Habc Domain - Epsinr Enth Domain Complex	2.11	12.50
44	440576043	alternative protein TGM7 [Homo sapiens]	2.20	24.56
45	253722224	Chain A, Irs-1 Ptb Domain Complexed With A Il-4 Receptor Phospho	4.20	26.79
46	197304953	Chain B, Dj-1 Activation By Catechol Quinone Modification	2.61	8.56
47	2780883	Chain N, Proteasome Activator Reg(Alpha)	2.32	7.86
48	404248974	immunoglobulin gamma heavy chain variable region, partial [Homo	2.62	26.19
49	223462007	CDC42BPA protein [Homo sapiens]	11.80	3.41
50	223460494	Myosin phosphatase Rho interacting protein [Homo sapiens]	6.02	4.24
51	219519058	CAMTA2 protein [Homo sapiens]	4.20	2.21
52	187952395	Plexin A2 [Homo sapiens]	9.95	2.59
53	118142820	TWISTNB protein [Homo sapiens]	1.54	3.10
54	71051965	SLC18A2 protein [Homo sapiens]	2.52	20.10
55	61970223	anti-oxLDL immunoglobulin heavy chain variable region, partial [Hor	7.81	12.71
56	45946348	WDR78 protein, partial [Homo sapiens]	2.58	1.70
57	45708577	Kruppel-like factor 3 (basic) [Homo sapiens]	5.17	1.74
58	40225490	ZNF343 protein, partial [Homo sapiens]	5.04	2.27
59	39644518	CLSTN2 protein, partial [Homo sapiens]	8.21	8.86
60	37589111	KIAA1370 protein, partial [Homo sapiens]	1.53	1.52

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2	36338349	SNX9 protein, partial [Homo sapiens]	1.55	2.47
3	34784468	CAMSAP1L1 protein, partial [Homo sapiens]	4.32	1.92
4	34783670	ZNF510 protein, partial [Homo sapiens]	2.33	2.31
5	33872592	NCOA7 protein, partial [Homo sapiens]	2.05	3.34
6	30046835	TRPM7 protein, partial [Homo sapiens]	2.68	3.55
7	29387268	ILF3 protein, partial [Homo sapiens]	2.48	2.56
8	29127019	HMHA1 protein, partial [Homo sapiens]	2.15	4.56
9	27882448	AGAP3 protein [Homo sapiens]	3.06	2.43
10	16198423	STT3B protein [Homo sapiens]	1.64	2.67
11	16041846	EF-hand calcium binding domain 7 [Homo sapiens]	5.68	3.50
12	15426553	ADD1 protein [Homo sapiens]	2.55	5.75
13	14495707	Jun B proto-oncogene [Homo sapiens]	2.27	3.17
14	13111947	SF3B3 protein [Homo sapiens]	2.09	2.76
15	1276428	FAC1 [Homo sapiens]	10.58	2.59
16	1001945	serine palmitoyltransferase, partial [Homo sapiens]	1.60	1.70
17	897824	AHNAK, partial [Homo sapiens]	6.14	3.60
18	553281	erythropoietin receptor, partial [Homo sapiens]	1.55	7.29
19	553243	HSrel-1 (AA at 250), partial [Homo sapiens]	15.18	17.14
20	386854	type II keratin subunit protein, partial [Homo sapiens]	224.41	39.35
21	386850	keratin K5, partial [Homo sapiens]	89.16	24.80
22	386820	interleukin-2 receptor precursor, partial [Homo sapiens]	2.52	8.76
23	292775	T-cell receptor beta, partial [Homo sapiens]	2.00	14.49
24	180394	collagen 1 pro-alpha-2 chain, partial [Homo sapiens]	2.55	32.14
25	178281	AHNAK nucleoprotein, partial [Homo sapiens]	10.02	4.58
26	6466068	ATP sulfurylase/APS kinase isoform SK2 [Homo sapiens]	9.09	7.92
27	82802728	KIF4B [Homo sapiens]	2.07	1.27
28	197115729	immunoglobulin heavy chain variable region [Homo sapiens]	4.34	17.53
29	247426213	immunoglobulin heavy chain variable region [Homo sapiens]	2.29	9.32
30	247425909	immunoglobulin heavy chain variable region [Homo sapiens]	21.42	15.83
31	247425468	immunoglobulin heavy chain variable region [Homo sapiens]	2.80	15.83
32	603074	ATP:citrate lyase [Homo sapiens]	4.71	1.00
33	4689154	neuronal cell death-related protein [Homo sapiens]	1.59	3.98
34	4689134	60S ribosomal protein L36 [Homo sapiens]	2.35	12.38
35	4454688	FtsH homolog [Homo sapiens]	4.76	7.74
36	2072953	putative p150 [Homo sapiens]	16.25	3.14
37	1881852	Sry-related HMG box gene [Homo sapiens]	3.47	2.31
38	1684931	immunoglobulin lambda light chain [Homo sapiens]	2.58	12.21
39	1620561	C-1 [Homo sapiens]	2.04	9.23
40	1438954	neuronal pentraxin 1 [Homo sapiens]	6.14	4.88
41	1066753	galactose-1-phosphate uridyl transferase [Homo sapiens]	5.29	32.08
42	685061	calcium sensor protein [Homo sapiens]	7.78	2.99
43	623409	keratin 10 [Homo sapiens]	221.84	48.13
44	190706	parathyroid-like protein precursor [Homo sapiens]	2.57	20.13
45	188586	myosin light chain 2 [Homo sapiens]	1.52	4.07
46	260513560	T cell receptor alpha chain [Homo sapiens]	1.54	9.62
47	5052950	unknown [Homo sapiens]	3.52	7.10
48	122892406	immunoglobulin heavy chain variable region [Homo sapiens]	2.56	20.16
49	116283844	IRGC protein [Homo sapiens]	2.78	8.07
50	82802708	eFI-2-gamma [Homo sapiens]	2.10	2.97
51	46325377	microcephalin [Homo sapiens]	2.02	33.33
52	33332354	HLC-6 [Homo sapiens]	2.57	4.13
53	28626027	N-acetyltransferase-like protein [Homo sapiens]	1.56	0.84
54	6841372	HSPC067 [Homo sapiens]	2.05	7.42
55	4680683	CGI-22 protein [Homo sapiens]	5.94	5.95
56	2735849	G protein-coupled receptor Edg-4 [Homo sapiens]	1.87	1.57
57	33570004	immunoglobulin kappa chain variable region [Homo sapiens]	2.43	21.35
58	14336717	unknown [Homo sapiens]	101.72	4.63
59	189041712	RecName: Full=Putative zinc finger protein ENSP00000344568	7.07	3.26
60	91980140	immunoglobulin heavy chain variable region [Homo sapiens]	17.32	23.47



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2	91980098	immunoglobulin heavy chain variable region [Homo sapiens]	2.02	22.83
3	63990112	unknown [Homo sapiens]	126.37	1.41
4	62988906	unknown [Homo sapiens]	2.24	0.56
5	62988890	unknown [Homo sapiens]	2.33	1.52
6	62822367	unknown [Homo sapiens]	2.07	1.57
7	62822150	unknown [Homo sapiens]	7.49	11.93
8	62702324	unknown [Homo sapiens]	2.50	12.12
9	62702310	unknown [Homo sapiens]	5.46	11.25
10	62702215	unknown [Homo sapiens]	4.44	5.03
11	62630090	unknown [Homo sapiens]	10.16	2.02
12	41393471	unknown [Homo sapiens]	2.78	1.48
13	22000462	immunoglobulin heavy chain variable region [Homo sapiens]	2.52	33.33
14	19744564	immunoglobulin light chain variable region [Homo sapiens]	1.62	6.60
15	14009267	N-myc downstream regulator 2 [Homo sapiens]	2.60	7.84
16	13123512	mitochondrial ribosomal protein-L5 heart-specific splice-variant [Homo sapiens]	4.35	7.84
17	12044071	immunoglobulin lambda chain variable region [Homo sapiens]	9.33	20.25
18	37182448	CCNL1 [Homo sapiens]	1.68	2.34
19	4883586	TSHR [Homo sapiens]	2.64	14.94
20	5919228	Na,K-ATPase catalytic subunit alpha-A protein [Homo sapiens]	2.16	40.63
21	450469	type 2 inositol 1,4,5-trisphosphate receptor [Homo sapiens]	8.81	0.85
22	211830808	KRT18 protein [Homo sapiens]	4.07	5.11
23	1617312	UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase (GalNAc 4-epimerase) [Homo sapiens]	6.06	3.16
24	98956308	immunoglobulin kappa light chain variable region [Homo sapiens]	2.52	22.22
25	66347234	retinoid X receptor, beta [Homo sapiens]	5.39	4.77
26	27552819	KANK4 protein [Homo sapiens]	4.13	5.50
27	166408625	immunoglobulin lambda variable region [Homo sapiens]	2.58	26.04
28	62089198	G patch domain and KOW motifs variant [Homo sapiens]	4.06	6.74
29	62089058	Inositol 1,4,5-trisphosphate receptor type 3 variant [Homo sapiens]	8.13	1.54
30	62088938	MCF.2 cell line derived transforming sequence variant [Homo sapiens]	2.73	4.60
31	62088878	Protein 4.1 variant [Homo sapiens]	6.43	3.39
32	62088678	N-glycanase 1 variant [Homo sapiens]	2.31	4.44
33	62088386	iron-responsive element binding protein 2 variant [Homo sapiens]	1.50	0.87
34	62087786	ATP-binding cassette C5 splicing variant A variant [Homo sapiens]	8.55	3.38
35	62087140	scaffold attachment factor B variant [Homo sapiens]	1.50	0.78
36	118600887	RNF20 protein [Homo sapiens]	5.80	7.11
37	116283836	RBM16 protein [Homo sapiens]	8.32	3.25
38	77747996	EIF2S2 protein [Homo sapiens]	5.49	42.53
39	54780770	immunoglobulin mu heavy chain [Homo sapiens]	2.59	30.19
40	145309046	POTE-2 alpha-actin [Homo sapiens]	19.49	5.30
41	32822886	SMC2 protein [Homo sapiens]	2.60	12.92
42	109693321	immunoglobulin heavy chain variable region [Homo sapiens]	2.80	16.53
43	112702683	immunoglobulin heavy chain variable region [Homo sapiens]	5.98	7.29
44	112702549	immunoglobulin heavy chain variable region [Homo sapiens]	2.01	20.20
45	112699381	immunoglobulin heavy chain variable region [Homo sapiens]	2.17	19.00
46	112697538	immunoglobulin heavy chain variable region [Homo sapiens]	15.35	28.28
47	112697352	immunoglobulin heavy chain variable region [Homo sapiens]	33.52	18.81
48	112696974	immunoglobulin heavy chain variable region [Homo sapiens]	75.33	30.69
49	112696000	immunoglobulin heavy chain variable region [Homo sapiens]	2.03	14.00
50	112694704	immunoglobulin heavy chain variable region [Homo sapiens]	12.86	23.76
51	112694612	immunoglobulin heavy chain variable region [Homo sapiens]	7.81	15.00
52	1565257	cerebroside sulfate activator [Homo sapiens]	2.92	5.71
53	1340149	adrenoleukodystrophy [Homo sapiens]	6.89	2.01
54	74146878	immunoglobulin epsilon heavy chain variable region [Homo sapiens]	1.68	8.80
55	95007527	immunoglobulin variable kappa chain [Homo sapiens]	2.51	23.89
56	71891770	KIAA0430 protein [Homo sapiens]	3.57	0.86
57	63089918	unnamed protein product [Homo sapiens]	9.18	6.00
58	63089534	unnamed protein product [Homo sapiens]	2.36	4.06
59	63089484	unnamed protein product [Homo sapiens]	5.42	45.83
60	31179	enolase [Homo sapiens]	14.07	12.01

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2	28557150	hornerin [Homo sapiens]	12.14	3.25
3	56675639	unnamed protein product [Homo sapiens]	2.04	17.00
4	42759878	immunoglobulin lambda-1 variable region [Homo sapiens]	2.11	14.81
5	40983044	unnamed protein product [Homo sapiens]	1.56	12.73
6	40982542	unnamed protein product [Homo sapiens]	3.12	20.93
7	40981914	unnamed protein product [Homo sapiens]	5.23	22.22
8	40981658	unnamed protein product [Homo sapiens]	2.02	23.33
9	40980420	unnamed protein product [Homo sapiens]	18.73	29.69
10	40980098	unnamed protein product [Homo sapiens]	2.01	16.80
11	40979676	unnamed protein product [Homo sapiens]	2.03	8.60
12	40977632	unnamed protein product [Homo sapiens]	6.35	16.42
13	40977326	unnamed protein product [Homo sapiens]	2.63	30.23
14	40977210	unnamed protein product [Homo sapiens]	2.99	21.78
15	40976806	unnamed protein product [Homo sapiens]	2.07	15.84
16	40976308	unnamed protein product [Homo sapiens]	2.29	14.43
17	40976260	unnamed protein product [Homo sapiens]	1.53	3.90
18	40976188	unnamed protein product [Homo sapiens]	2.00	12.70
19	40976100	unnamed protein product [Homo sapiens]	6.29	22.22
20	40976098	unnamed protein product [Homo sapiens]	2.08	17.78
21	40976034	unnamed protein product [Homo sapiens]	5.36	7.07
22	40975666	unnamed protein product [Homo sapiens]	2.02	13.33
23	40047186	unnamed protein product [Homo sapiens]	2.08	13.86
24	40047060	unnamed protein product [Homo sapiens]	2.21	15.69
25	40046916	unnamed protein product [Homo sapiens]	2.73	23.85
26	40046616	unnamed protein product [Homo sapiens]	2.10	13.33
27	40046356	unnamed protein product [Homo sapiens]	1.64	7.78
28	40046294	unnamed protein product [Homo sapiens]	3.42	17.24
29	40046010	unnamed protein product [Homo sapiens]	2.10	16.25
30	40045048	unnamed protein product [Homo sapiens]	2.23	31.37
31	40044556	unnamed protein product [Homo sapiens]	2.16	18.75
32	40043814	unnamed protein product [Homo sapiens]	4.13	9.35
33	40043348	unnamed protein product [Homo sapiens]	3.82	9.93
34	40042992	unnamed protein product [Homo sapiens]	2.28	10.75
35	40042932	unnamed protein product [Homo sapiens]	2.16	13.10
36	40042720	unnamed protein product [Homo sapiens]	2.26	11.83
37	40042484	unnamed protein product [Homo sapiens]	2.01	8.80
38	40042292	unnamed protein product [Homo sapiens]	2.87	11.21
39	40041898	unnamed protein product [Homo sapiens]	2.88	11.89
40	40041828	unnamed protein product [Homo sapiens]	2.57	33.33
41	40041812	unnamed protein product [Homo sapiens]	2.10	16.33
42	40041348	unnamed protein product [Homo sapiens]	2.13	7.59
43	40041274	unnamed protein product [Homo sapiens]	2.56	24.17
44	40041050	unnamed protein product [Homo sapiens]	3.75	18.84
45	40041032	unnamed protein product [Homo sapiens]	1.78	15.09
46	40040964	unnamed protein product [Homo sapiens]	2.09	15.58
47	40040600	unnamed protein product [Homo sapiens]	3.63	15.84
48	40040594	unnamed protein product [Homo sapiens]	3.77	31.18
49	40040382	unnamed protein product [Homo sapiens]	5.16	12.88
50	40039184	unnamed protein product [Homo sapiens]	2.11	20.69
51	27900479	unnamed protein product [Homo sapiens]	12.89	24.36
52	27529704	KIAA0239 [Homo sapiens]	2.11	1.88
53	23385949	unnamed protein product [Homo sapiens]	4.67	1.71
54	473714	RNA helicase [Homo sapiens]	2.76	4.56
55	21998781	immunoglobulin lambda chain variable region [Homo sapiens]	2.03	17.27
56	21697811	unnamed protein product [Homo sapiens]	3.84	2.76
57	21669915	immunoglobulin heavy chain VHDJ region [Homo sapiens]	7.79	8.94
58	21669671	immunoglobulin lambda light chain VLJ region [Homo sapiens]	2.54	7.22
59	21669511	immunoglobulin lambda light chain VLJ region [Homo sapiens]	42.72	6.69
60	21669043	immunoglobulin heavy chain VHDJ region [Homo sapiens]	13.65	16.13

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2	20521075	KIAA0539 protein [Homo sapiens]	7.43	0.78
3	18698403	immunoglobulin light chain variable region [Homo sapiens]	2.46	14.04
4	4432756	ribosomal protein L34 [Homo sapiens]	1.76	15.56
5	3088336	ribosomal protein S5 [Homo sapiens]	4.65	27.27
6	18098062	unnamed protein product [Homo sapiens]	2.65	2.09
7	16266931	Musashi1 [Homo sapiens]	9.20	10.06
8	16076426	immunoglobulin heavy chain variable region [Homo sapiens]	155.38	22.99
9	16076402	immunoglobulin heavy chain variable region [Homo sapiens]	1.53	13.10
10	16076293	immunoglobulin heavy chain variable region [Homo sapiens]	4.04	23.53
11	12309812	unnamed protein product [Homo sapiens]	4.21	6.38
12	8250273	IgG heavy chain variable region [Homo sapiens]	2.56	21.23
13	3790366	MNB/DYRK protein kinase [Homo sapiens]	2.39	10.07
14	7243041	KIAA1330 protein [Homo sapiens]	3.95	2.12
15	6526769	HRIHFB2003 [Homo sapiens]	3.82	3.83
16	6330854	KIAA1249 protein [Homo sapiens]	1.55	1.16
17	3882181	KIAA0730 protein [Homo sapiens]	2.54	2.89
18	3327176	KIAA0681 protein [Homo sapiens]	2.05	2.04
19	1097157	familial Alzheimer's disease protein 1	2.61	6.82
20	229585	Ig A1 Bur	4.48	4.23
21	929609	unnamed protein product [Homo sapiens]	2.09	7.69
22	602023	unnamed protein product [Homo sapiens]	2.25	7.30
23	563379	mucin [Homo sapiens]	4.75	21.67
24	37589	unnamed protein product [Homo sapiens]	2.75	5.11
25	578797420	PREDICTED: uncharacterized protein LOC101930546 [Homo sapiens]	2.27	3.61
26	530429173	PREDICTED: death domain-associated protein 6 isoform X3 [Homo sapiens]	2.13	4.57
27	530426677	PREDICTED: zinc finger MYND domain-containing protein 19 isoform X1 [Homo sapiens]	3.13	5.90
28	530422989	PREDICTED: melatonin-related receptor isoform X1 [Homo sapiens]	2.46	7.05
29	530420498	PREDICTED: THO complex subunit 5 homolog isoform X4 [Homo sapiens]	10.95	3.66
30	530418855	PREDICTED: biotin--protein ligase isoform X2 [Homo sapiens]	2.30	2.13
31	530417365	PREDICTED: ankyrin repeat domain-containing protein 27 isoform X1 [Homo sapiens]	2.02	2.58
32	530416474	PREDICTED: intermediate conductance calcium-activated potassium channel subunit alpha 1 isoform X1 [Homo sapiens]	2.13	5.22
33	530416023	PREDICTED: zinc finger protein 30 homolog isoform X7 [Homo sapiens]	2.07	3.09
34	530415146	PREDICTED: ubiquitin-60S ribosomal protein L40 isoform X2 [Homo sapiens]	46.05	42.29
35	530414784	PREDICTED: protein Hook homolog 2 isoform X6 [Homo sapiens]	3.15	4.02
36	530410977	PREDICTED: flotillin-2 isoform X4 [Homo sapiens]	1.53	1.71
37	530409203	PREDICTED: 3 beta-hydroxysteroid dehydrogenase type 7 isoform X1 [Homo sapiens]	2.57	5.96
38	530408236	PREDICTED: polycystin-1 isoform X5 [Homo sapiens]	4.79	1.22
39	530407818	PREDICTED: uncharacterized protein KIAA0556 isoform X8 [Homo sapiens]	8.96	1.98
40	530405878	PREDICTED: protein unc-13 homolog C isoform X2 [Homo sapiens]	5.65	1.92
41	530401067	PREDICTED: ubiquitin carboxyl-terminal hydrolase 15 isoform X3 [Homo sapiens]	1.67	1.70
42	530399966	PREDICTED: UHRF1-binding protein 1-like isoform X1 [Homo sapiens]	6.42	1.11
43	530399511	PREDICTED: C2 domain-containing protein 5 isoform X8 [Homo sapiens]	2.59	4.31
44	530398206	PREDICTED: sialate O-acetyltransferase isoform X1 [Homo sapiens]	1.53	2.92
45	530397581	PREDICTED: synaptotagmin-7 isoform X7 [Homo sapiens]	2.58	6.51
46	530394820	PREDICTED: janus kinase and microtubule-interacting protein 3 isoform X1 [Homo sapiens]	3.52	1.42
47	530389632	PREDICTED: izumo sperm-egg fusion protein 3 isoform X2 [Homo sapiens]	9.25	8.33
48	530388682	PREDICTED: collectin-10 isoform X1 [Homo sapiens]	3.30	3.85
49	530387087	PREDICTED: zinc finger protein 862 isoform X2 [Homo sapiens]	36.08	3.23
50	530386907	PREDICTED: GTPase IMAP family member 8 isoform X2 [Homo sapiens]	3.62	4.17
51	530383912	PREDICTED: E3 ubiquitin-protein ligase HACE1 isoform X3 [Homo sapiens]	1.68	1.57
52	530383351	PREDICTED: kelch-like protein 32 isoform X6 [Homo sapiens]	2.66	2.27
53	530380047	PREDICTED: E3 ubiquitin-protein ligase TRIM36 isoform X4 [Homo sapiens]	3.95	5.77
54	530378158	PREDICTED: DNA transposase THAP9 isoform X1 [Homo sapiens]	2.13	2.37
55	530377909	PREDICTED: Ia-related protein 1B isoform X16 [Homo sapiens]	12.73	1.49
56	530373508	PREDICTED: serine/threonine-protein kinase OSR1 isoform X1 [Homo sapiens]	8.67	6.74
57	530373461	PREDICTED: TBC1 domain family member 5 isoform X6 [Homo sapiens]	1.53	1.03
58	530372382	PREDICTED: acylamino-acid-releasing enzyme isoform X2 [Homo sapiens]	1.59	1.58
59	530371943	PREDICTED: zinc finger CW-type PWWP domain protein 2 isoform X1 [Homo sapiens]	16.84	1.86
60	530371457	PREDICTED: diacylglycerol kinase delta isoform X4 [Homo sapiens]	8.51	0.88

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2	530368845	PREDICTED: interleukin-18 receptor 1 isoform X2 [Homo sapiens]	2.05	4.10
3	530368776	PREDICTED: E3 SUMO-protein ligase RanBP2 isoform X5 [Homo sap	4.58	1.08
4	530367826	PREDICTED: girdin isoform X9 [Homo sapiens]	6.35	3.36
5	530367324	PREDICTED: dystrobrevin beta isoform X6 [Homo sapiens]	5.00	11.32
6	530366678	PREDICTED: unhealthy ribosome biogenesis protein 2 homolog isofc	2.97	1.68
7	578801162	PREDICTED: protoporphyrinogen oxidase isoform X11 [Homo sapier	2.74	5.88
8	530363331	PREDICTED: SH3 domain-containing protein 21 isoform X2 [Homo s	1.56	1.49
9	519674472	immunoglobulin A heavy chain variable region, partial [Homo sapier	2.00	11.11
10	519674244	immunoglobulin A heavy chain variable region, partial [Homo sapier	2.52	23.58
11	519674180	immunoglobulin A heavy chain variable region, partial [Homo sapier	5.64	15.83
12	519674088	immunoglobulin A heavy chain variable region, partial [Homo sapier	2.53	15.83
13	519673838	immunoglobulin A heavy chain variable region, partial [Homo sapier	66.85	7.44
14	519673812	immunoglobulin A heavy chain variable region, partial [Homo sapier	4.50	15.83
15	519673648	immunoglobulin A heavy chain variable region, partial [Homo sapier	7.56	20.51
16	519673468	immunoglobulin A heavy chain variable region, partial [Homo sapier	11.50	9.09
17	519672710	immunoglobulin A heavy chain variable region, partial [Homo sapier	2.78	15.45
18	519672644	immunoglobulin A heavy chain variable region, partial [Homo sapier	5.17	21.14
19	519672366	immunoglobulin A heavy chain variable region, partial [Homo sapier	2.01	9.32
20	519672308	immunoglobulin A heavy chain variable region, partial [Homo sapier	2.61	20.63
21	519672238	immunoglobulin A heavy chain variable region, partial [Homo sapier	4.88	5.13
22	389604444	MHC class II antigen, partial [Homo sapiens]	2.09	11.48
23	385843546	immunoglobulin G4 heavy chain variable region, partial [Homo sapie	13.61	11.70
24	479274698	casein kinase II b subunit splicing isoform 318 [Homo sapiens]	2.17	23.76
25	294979767	Chain E, Crystal Structure Of P120 Catenin In Complex With E-cadhe	2.11	3.42
26	163310782	Chain A, Crystal Structure Of Cert Start Domain In Complex With Cl	2.02	4.71
27	146386490	Chain A, Discovery Of 2-pyrimidyl-5-amidothiophenes As Novel And	2.22	4.45
28	448262603	Chain B, Crystal Structure Of Hbrap1 N-bar Domain	7.65	7.24
29	372467016	Chain F, Crystal Structure Of A Linear-Specific Ubiquitin Fab Bound	2.60	11.89
30	422920087	Chain A, U7ub7 Disulfide Variant	10.39	40.26
31	152149455	Chain D, Design And Synthesis Of Novel, Conformationally Restrict	2.11	3.63
32	410698506	pro-opiomelanocortin, partial [Homo sapiens]	2.01	10.11
33	149242231	Chain A, Beta Appendage In Complex With B-Arrestin Peptide	2.53	11.34
34	355333098	Chain A, Iap Antagonist-Induced Conformational Change In Ciap1 P	2.62	7.54
35	310942977	Chain P, Cf Im25-Cf Im68-Uguua Complex	2.02	15.56
36	364505846	Chain A, Structure Of The Noxo1b Px Domain	2.04	9.40
37	315583372	Chain A, Solution Nmr Structure Of Pap248-286 In 30% Tfe	193.91	48.72
38	291191168	Chain H, Crystal Structure Of Li33 Igg1 Fab	8.23	8.37
39	283135299	Chain A, Solution Structure Of Eif3b-Rrm Bound To Eif3j Peptide	2.46	22.22
40	224983568	Chain B, Glycogen Synthase Kinase 3beta Inhibitor Complex	2.04	2.87
41	183448317	Chain A, Complex Between Pp2a-Specific Methyltransferase Pme-1 Anc	2.52	10.78
42	159794776	Chain A, Solution Structure Of First Pdz Domain Of Pdz Domain Con	1.52	8.00
43	159163891	Chain A, Solution Structure Of Wgr Domain Of Poly(Adp-Ribose) Pol	4.23	18.71
44	159163791	Chain A, Nmr Solution Structure Of Phospholipase C Epsilon Ra 1 Dc	2.62	25.45
45	157830410	Chain A, Monocyte Chemoattractant Protein-3, Nmr, Minimized Aver	2.13	21.05
46	14278227	Chain B, Nmr Structure Of Dff40 And Dff45 N-Terminal Domain Cor	3.42	10.34
47	260656175	Chain A, Crystal Structure Of The Catalytic Core Domain Of Jmjd2d	2.59	7.91
48	400653669	immunoglobulin heavy chain variable region, partial [Homo sapiens]	2.09	19.35
49	379030845	BCL6 corepressor-cyclin B3 fusion protein [Homo sapiens]	3.63	0.86
50	113195993	T-cell receptor beta chain variable region, partial [Homo sapiens]	2.57	44.44
51	73426694	immunoglobulin kappa chain, partial [Homo sapiens]	5.05	90.00
52	2896146	transcriptional coactivator ALY, partial [Homo sapiens]	2.02	8.15
53	1800303	HIV-1 Nef interacting protein, partial [Homo sapiens]	2.48	1.94
54	1685102	NifU-like protein, partial [Homo sapiens]	1.51	5.79
55	1658578	ribosomal L5 protein, partial [Homo sapiens]	2.21	8.28
56	1280308	T-cell receptor beta chain, partial [Homo sapiens]	1.62	30.77
57	1061310	valyl-tRNA synthetase, partial [Homo sapiens]	7.80	3.67
58	987255	Menkes disease gene, partial [Homo sapiens]	2.64	2.07
59	726469	voltage-gated potassium channel beta subunit, partial [Homo sapier	2.65	21.05
60	726044	VT4, partial [Homo sapiens]	8.54	7.27

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2	185262	Ig H-chain 2A4 precursor V4-D-J6 region, partial [Homo sapiens]	4.03	12.42
3	181033	retinol-binding protein, partial [Homo sapiens]	2.52	18.18
4	375314773	keratin 1 [Homo sapiens]	360.69	58.70
5	375004613	EPRSN1 [Homo sapiens]	2.10	1.85
6	371447985	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	2.29	14.88
7	371447973	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	2.19	18.18
8	371446332	immunoglobulin G heavy chain variable region, partial [Homo sapiens]	1.55	3.97
9	354686620	immunoglobulin heavy chain variable region [Homo sapiens]	2.05	27.03
10	353255736	anti-tetanus toxoid immunoglobulin light chain variable region [Homo sapiens]	2.09	11.54
11	346704184	unnamed protein product [Homo sapiens]	59.55	6.26
12	328942848	immunoglobulin heavy chain variable region [Homo sapiens]	4.08	22.47
13	329581998	MHC class I antigen [Homo sapiens]	2.59	7.42
14	259121493	MHC class I antigen [Homo sapiens]	11.05	11.05
15	323433006	immunoglobulin variable region [Homo sapiens]	2.10	15.32
16	323432331	immunoglobulin variable region [Homo sapiens]	2.52	14.71
17	323431376	immunoglobulin variable region [Homo sapiens]	2.27	15.00
18	224028035	MHC class I antigen [Homo sapiens]	2.01	4.40
19	238684834	MHC class II antigen [Homo sapiens]	3.67	30.34
20	166897665	BCR/ABL e14a2 fusion protein [Homo sapiens]	2.83	19.75
21	37021685	MHC class II antigen [Homo sapiens]	2.12	25.00
22	33319654	Ig heavy chain variable region, VH3 family [Homo sapiens]	5.30	23.48
23	33319542	Ig heavy chain variable region, VH3 family [Homo sapiens]	2.19	11.38
24	33319008	Ig heavy chain variable region, VH3 family [Homo sapiens]	4.19	15.45
25	264668688	gamma-aminobutyric acid A receptor beta 2 [Homo sapiens]	4.75	27.16
26	304563748	immunoglobulin gamma 4 heavy chain variable region [Homo sapiens]	16.47	14.73
27	304563442	immunoglobulin gamma 1 heavy chain variable region [Homo sapiens]	2.59	17.07
28	304563158	immunoglobulin gamma 1 heavy chain variable region [Homo sapiens]	2.81	23.97
29	304562832	immunoglobulin gamma 1 heavy chain variable region [Homo sapiens]	2.66	21.09
30	304562636	immunoglobulin gamma 1 heavy chain variable region [Homo sapiens]	2.10	13.49
31	304562630	immunoglobulin gamma 1 heavy chain variable region [Homo sapiens]	2.71	12.10
32	304562501	immunoglobulin gamma 2 heavy chain variable region [Homo sapiens]	2.87	22.31
33	304562401	immunoglobulin gamma 2 heavy chain variable region [Homo sapiens]	2.55	21.71
34	304561958	immunoglobulin gamma 3 heavy chain variable region [Homo sapiens]	4.67	33.90
35	304561900	immunoglobulin gamma 3 heavy chain variable region [Homo sapiens]	17.57	16.00
36	114147670	immunoglobulin heavy chain variable region [Homo sapiens]	1.69	7.56
37	46852026	hypothetical rhabdomyosarcoma antigen MU-RMS-40.15 [Homo sapiens]	11.52	2.42
38	633926	APK1 antigen [Homo sapiens]	2.01	5.32
39	478885	FR-gamma' [Homo sapiens]	9.75	16.35
40	189397	ORF [Homo sapiens]	4.34	6.38
41	44887465	T cell antigen receptor alpha chain [Homo sapiens]	2.52	9.93
42	10643592	centrosomal P4.1-associated protein [Homo sapiens]	5.55	2.17
43	2145062	TTF-I interacting peptide 21 [Homo sapiens]	97.94	4.92
44	4587127	unnamed protein product [Homo sapiens]	4.37	12.03
45	636666479	Chain B, Steroid Receptor Rna Activator (sra) Modification By The H	4.76	3.83
46	570359685	Chain A, A Thermostable Variant Of Human Nudt18 Nudix Domain C	2.71	16.05
47	584277117	excitatory amino acid transporter 1 isoform 5 [Homo sapiens]	4.19	8.84
48	608785746	G protein-coupled receptor 89B isoform A [Homo sapiens]	2.55	54.55
49	608785541	nudE neurodevelopment protein 1 isoform D, partial [Homo sapiens]	2.15	3.17
50	608785229	contactin associated protein-like 2 isoform B, partial [Homo sapiens]	4.40	1.93
51	578829816	PREDICTED: telomerase-binding protein EST1A isoform X4 [Homo sapiens]	3.10	1.11
52	578827039	PREDICTED: myelin expression factor 2 isoform X3 [Homo sapiens]	8.09	11.09
53	578823928	PREDICTED: stabilin-2 isoform X1 [Homo sapiens]	8.21	0.98
54	578802129	PREDICTED: lysosomal-trafficking regulator isoform X5 [Homo sapiens]	4.62	1.09
55	632933512	RNA-specific adenosine deaminase [Homo sapiens]	2.56	2.77
56	615276301	nephrocystin-4 isoform b [Homo sapiens]	7.07	2.41
57	612406815	anti-HIV-1 immunoglobulin cap256-059-137547 chain variable region	2.05	8.33
58	612406323	anti-HIV-1 immunoglobulin cap256-048-012148 chain variable region	13.42	13.19
59	612405920	anti-HIV-1 immunoglobulin 119-075862 chain variable region, partial	2.56	21.30
60	608073328	interferon regulatory factor 1 isoform +I9 [Homo sapiens]	2.42	5.92



1	380041936	SETDB2-PHF11 fusion protein variant 6, partial [Homo sapiens]	2.06	7.78
2	578846035	PREDICTED: polycystin-1-like [Homo sapiens]	1.61	1.18
3	578843125	PREDICTED: protein piccolo-like [Homo sapiens]	1.60	2.43
4	578840717	PREDICTED: T-box transcription factor TBX22 isoform X3 [Homo sapiens]	2.38	4.57
5	578840688	PREDICTED: D-dopachrome decarboxylase isoform X1 [Homo sapiens]	11.00	14.35
6	578839183	PREDICTED: gamma-glutamyltranspeptidase 2-like isoform X9 [Homo sapiens]	6.33	5.42
7	578838365	PREDICTED: ADP-ribosylation factor-like protein 13A isoform X2 [Homo sapiens]	2.04	8.00
8	578836486	PREDICTED: GDP-fucose protein O-fucosyltransferase 2 isoform X2	2.51	6.54
9	578836465	PREDICTED: Lebercilin-like protein isoform X9 [Homo sapiens]	3.85	2.41
10	578832531	PREDICTED: nuclear factor of activated T-cells, cytoplasmic 1 isoform X1	2.62	4.69
11	578831093	PREDICTED: protein FAM20A isoform X3 [Homo sapiens]	6.30	8.03
12	578830653	PREDICTED: polycomb protein SUZ12 isoform X3 [Homo sapiens]	1.62	1.49
13	578830621	PREDICTED: arylsulfatase G isoform X8 [Homo sapiens]	4.27	7.25
14	578830460	PREDICTED: RNA binding protein fox-1 homolog 3 isoform X7 [Homo sapiens]	2.06	4.27
15	578830293	PREDICTED: DNA polymerase subunit gamma-2, mitochondrial isoform X1	12.67	6.06
16	578830152	PREDICTED: rho GTPase-activating protein 44 isoform X5 [Homo sapiens]	2.01	1.88
17	578830040	PREDICTED: PHD finger protein 23 isoform X4 [Homo sapiens]	2.02	1.72
18	578829793	PREDICTED: lysine-specific demethylase 6B isoform X8 [Homo sapiens]	6.23	1.34
19	578828959	PREDICTED: ankyrin repeat domain-containing protein 11 isoform X1	25.86	1.17
20	578827640	PREDICTED: kinesin-like protein KIF23 isoform X8 [Homo sapiens]	14.94	1.44
21	578827191	PREDICTED: unconventional myosin-Vc isoform X1 [Homo sapiens]	10.57	1.64
22	578826600	PREDICTED: probable threonine--tRNA ligase 2, cytoplasmic isoform X1	4.99	2.47
23	578825877	PREDICTED: dapper homolog 1 isoform X1 [Homo sapiens]	15.89	3.21
24	578825333	PREDICTED: transmembrane and coiled-coil domain-containing protein 1	2.53	6.81
25	578824341	PREDICTED: coiled-coil domain-containing protein 62 isoform X4 [Homo sapiens]	9.55	4.27
26	578824259	PREDICTED: centrosomal protein of 290 kDa isoform X6 [Homo sapiens]	26.34	3.36
27	578823704	PREDICTED: ADP-ribosylation factor 3 isoform X2 [Homo sapiens]	2.37	7.30
28	578823287	PREDICTED: coiled-coil domain-containing protein 38 isoform X2 [Homo sapiens]	3.74	6.22
29	578823068	PREDICTED: liprin-beta-1 isoform X14 [Homo sapiens]	3.13	3.28
30	578821565	PREDICTED: serine/threonine-protein phosphatase 6 regulatory subunit 1	20.12	2.19
31	578818557	PREDICTED: supervillin isoform X15 [Homo sapiens]	3.03	0.54
32	578816882	PREDICTED: cortactin-binding protein 2-like [Homo sapiens]	2.12	4.27
33	578815689	PREDICTED: zinc finger protein 704 isoform X2 [Homo sapiens]	2.82	6.88
34	578814737	PREDICTED: diacylglycerol kinase iota isoform X3 [Homo sapiens]	2.11	2.82
35	578814353	PREDICTED: phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit delta	2.09	0.80
36	578812604	PREDICTED: nesprin-1 isoform X19 [Homo sapiens]	22.36	1.18
37	578812547	PREDICTED: protein dopey-1 isoform X8 [Homo sapiens]	4.14	0.99
38	578812030	PREDICTED: receptor-interacting serine/threonine-protein kinase 1 isoform X1	4.33	6.46
39	578811659	PREDICTED: trem-like transcript 1 protein isoform X1 [Homo sapiens]	2.00	13.17
40	578810422	PREDICTED: cyclin-dependent kinase-like 3 isoform X10 [Homo sapiens]	10.79	6.51
41	578810298	PREDICTED: E3 ubiquitin-protein ligase RNF180 isoform X3 [Homo sapiens]	2.04	4.10
42	578809969	PREDICTED: uncharacterized protein C5orf42 isoform X12 [Homo sapiens]	5.83	1.00
43	578809149	PREDICTED: serine/threonine-protein kinase Nek1 isoform X2 [Homo sapiens]	1.50	0.57
44	578808887	PREDICTED: coiled-coil domain-containing protein 111 isoform X3 [Homo sapiens]	3.72	2.39
45	578807573	PREDICTED: intraflagellar transport protein 122 homolog isoform X1	2.08	1.14
46	578807124	PREDICTED: protein ECT2 isoform X8 [Homo sapiens]	3.85	3.04
47	578806122	PREDICTED: microtubule-associated protein 4 isoform X51 [Homo sapiens]	2.06	1.39
48	578805209	PREDICTED: nuclear body protein SP140-like protein isoform X6 [Homo sapiens]	4.17	8.13
49	578804810	PREDICTED: trafficking kinesin-binding protein 2 isoform X1 [Homo sapiens]	7.19	1.14
50	578804640	PREDICTED: E3 ubiquitin-protein ligase HECW2 isoform X4 [Homo sapiens]	8.73	1.91
51	578804299	PREDICTED: ankyrin repeat domain-containing protein 36A isoform X1	4.32	2.79
52	578802318	PREDICTED: probable methyltransferase TARBP1 isoform X2 [Homo sapiens]	5.04	2.06
53	578802311	PREDICTED: ryanodine receptor 2 isoform X8 [Homo sapiens]	4.86	1.32
54	578801002	PREDICTED: pre-B-cell leukemia transcription factor 1 isoform X4 [Homo sapiens]	2.59	6.72
55	578800972	PREDICTED: metaxin-1 isoform X1 [Homo sapiens]	1.56	4.15
56	578799998	PREDICTED: uncharacterized protein KIAA1751 isoform X3 [Homo sapiens]	3.73	1.42
57	578799700	PREDICTED: solute carrier family 35 member E2B isoform X2 [Homo sapiens]	4.23	4.52
58	578798828	PREDICTED: microtubule-actin cross-linking factor 1 isoform X24 [Homo sapiens]	7.48	0.61
59	578798776	PREDICTED: E3 ubiquitin-protein ligase UBR4 isoform X13 [Homo sapiens]	4.58	0.58

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2	578798666	PREDICTED: polycomb protein SCMH1 isoform X10 [Homo sapiens]	4.90	5.62
3	578796804	PREDICTED: filaggrin-like isoform X5 [Homo sapiens]	5.39	1.00
4	578794871	PREDICTED: serine/arginine repetitive matrix protein 1-like [Homo sapiens]	3.55	5.57
5	568779352	PJA2/FER fusion protein [Homo sapiens]	4.18	2.21
6	568245056	AKAP350C [Homo sapiens]	5.42	1.02
7	564730730	Chain C, Hiv-1 Vif Socs-box And Elongin Bc Solution Structure	4.81	21.98
8	118406061	immunoglobulin heavy chain variable region [Homo sapiens]	2.20	15.87
9	47088185	AIDA-1bDAnk [Homo sapiens]	4.28	3.87
10	34396082	cell death activator [Homo sapiens]	2.97	10.96
11	21666318	cervical cancer suppressor gene 5 [Homo sapiens]	2.40	14.41
12	18001260	CKII beta binding protein 2 [Homo sapiens]	2.51	16.13
13	16326438	pregnancy-associated plasma protein E2 [Homo sapiens]	5.22	0.73
14	15029567	PR/SET domain-containing protein 07 [Homo sapiens]	2.26	5.60
15	14289323	LIP isoform of BLIP [Homo sapiens]	4.70	1.30
16	11526821	nuclear receptor coactivator CIA [Homo sapiens]	1.52	1.13
17	5813799	Che-1 [Homo sapiens]	5.59	2.15
18	5106572	transcriptional activator SRCAP [Homo sapiens]	8.84	0.98
19	5059425	RIP-like kinase [Homo sapiens]	4.18	5.21
20	4732139	smoothened [Homo sapiens]	5.12	30.00
21	4240391	lecithin retinol acyltransferase [Homo sapiens]	2.52	14.35
22	3659901	F1F0-type ATP synthase subunit g [Homo sapiens]	3.61	23.30
23	146330322	immunoglobulin heavy chain variable region [Homo sapiens]	2.03	11.11
24	270054608	immunoglobulin heavy chain variable region [Homo sapiens]	8.00	20.87
25	270054355	immunoglobulin heavy chain variable region [Homo sapiens]	2.73	24.56
26	270053188	immunoglobulin heavy chain variable region [Homo sapiens]	130.54	9.17
27	270053146	immunoglobulin heavy chain variable region [Homo sapiens]	2.11	16.96
28	270053106	immunoglobulin heavy chain variable region [Homo sapiens]	8.80	9.91
29	270052393	immunoglobulin heavy chain variable region [Homo sapiens]	2.01	11.40
30	270047366	immunoglobulin heavy chain variable region [Homo sapiens]	2.37	13.10
31	270046664	immunoglobulin heavy chain variable region [Homo sapiens]	22.53	8.33
32	28269794	factor VII active site mutant immunoconjugate [Homo sapiens]	4.80	5.89
33	13991483	psoriasis vulgaris immunoglobulin heavy chain [Homo sapiens]	2.56	17.53
34	11275612	CTCL tumor antigen se2-5 [Homo sapiens]	2.61	2.55
35	55139084	MHC class II antigen [Homo sapiens]	2.76	11.65
36	46254063	immunoglobulin heavy chain [Homo sapiens]	2.81	16.36
37	46253885	immunoglobulin heavy chain [Homo sapiens]	4.36	13.10
38	40388596	immunoglobulin light chain [Homo sapiens]	1.60	11.94
39	39939605	immunoglobulin heavy chain variable region [Homo sapiens]	2.20	11.28
40	37789670	immunoglobulin lambda light chain variable region [Homo sapiens]	9.19	19.51
41	4097704	unknown protein [Homo sapiens]	2.79	7.80
42	3560559	cellular apoptosis susceptibility protein [Homo sapiens]	1.51	3.79
43	2145178	IgM rheumatoid factor RF-TT3, variable heavy chain [Homo sapiens]	2.17	10.34
44	261385167	unnamed protein product [Homo sapiens]	1.53	3.70
45	257297088	unnamed protein product [Homo sapiens]	3.27	8.70
46	145939086	immunoglobulin heavy chain variable region [Homo sapiens]	2.56	41.30
47	145911945	immunoglobulin heavy chain variable region [Homo sapiens]	1.50	10.47
48	28375607	unnamed protein product [Homo sapiens]	2.65	1.42
49	28193156	unnamed protein product [Homo sapiens]	3.69	3.02
50	21740354	hypothetical protein [Homo sapiens]	2.25	3.11
51	21740309	hypothetical protein [Homo sapiens]	2.57	22.93
52	6808437	hypothetical protein [Homo sapiens]	2.01	4.49
53	6599262	hypothetical protein [Homo sapiens]	2.56	2.33
54	5911879	hypothetical protein [Homo sapiens]	2.54	5.33
55	5911871	hypothetical protein [Homo sapiens]	2.11	12.90
56	51476814	hypothetical protein [Homo sapiens]	6.27	5.08
57	50949930	hypothetical protein [Homo sapiens]	2.05	1.99
58	9663119	PEX5 related protein [Homo sapiens]	2.16	2.91
59	3255987	HIRIP3 [Homo sapiens]	1.78	1.37
60	639693	transcription factor [Homo sapiens]	5.71	3.16



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2	505033	mitogen inducible gene mig-2 [Homo sapiens]	8.51	8.19
3	62550765	killer cell immunoglobulin-like receptor [Homo sapiens]	2.59	23.15
4	32177	HLA-B27 [Homo sapiens]	1.55	2.21
5	171853469	immunoglobulin heavy chain variable region [Homo sapiens]	2.00	22.06
6	156633220	immunoglobulin kappa 1 light chain [Homo sapiens]	6.35	12.04
7	156632946	immunoglobulin lambda 2 light chain [Homo sapiens]	2.03	14.41
8	161727494	T cell receptor beta variable 7 [Homo sapiens]	2.04	8.51
9	62897719	calcium binding protein Cab45 precursor variant [Homo sapiens]	2.12	5.52
10	118640476	KIR3DL2 [Homo sapiens]	2.52	7.69
11	134254698	peroxiredoxin 6 [Homo sapiens]	2.07	12.50
12	5420190	hypothetical protein [Homo sapiens]	2.18	2.21
13	3326993	SNF5/INI1 protein [Homo sapiens]	2.58	6.20
14	1524099	TFE3 transcription factor [Homo sapiens]	6.64	2.77
15	111922752	unnamed protein product [Homo sapiens]	2.02	1.56
16	108250378	unnamed protein product [Homo sapiens]	2.37	3.49
17	108250370	unnamed protein product [Homo sapiens]	4.66	4.97
18	37998957	chimeric MOZ-ASX2 fusion protein [Homo sapiens]	4.58	1.62
19	31044222	TPA_exp: MICAL-like 2 [Homo sapiens]	11.59	1.56
20	84784317	alpha-1-antitrypsin MBrescia variant [Homo sapiens]	6.92	20.22
21	78927052	mitochondrial steroid acute regulatory protein [Homo sapiens]	4.26	39.47
22	73810004	MYO9 isoform 2 [Homo sapiens]	5.25	3.70
23	71273688	immunoglobulin heavy chain variable region [Homo sapiens]	5.65	26.26
24	66349786	unnamed protein product [Homo sapiens]	2.13	2.35
25	31873859	hypothetical protein [Homo sapiens]	1.50	4.44
26	21739582	hypothetical protein [Homo sapiens]	1.63	1.66
27	60221954	unnamed protein product [Homo sapiens]	2.66	8.82
28	56675533	unnamed protein product [Homo sapiens]	5.22	29.41
29	54304382	unnamed protein product [Homo sapiens]	3.07	9.69
30	50949358	hypothetical protein [Homo sapiens]	5.39	5.31
31	6808239	hypothetical protein [Homo sapiens]	2.02	5.69
32	50834324	unnamed protein product [Homo sapiens]	2.31	3.58
33	47846703	immunoglobulin heavy chain variable region [Homo sapiens]	34.32	15.83
34	45503834	unnamed protein product [Homo sapiens]	1.77	2.45
35	44845565	unnamed protein product [Homo sapiens]	2.77	100.00
36	2439517	putative RHO/RAC effector protein; 95% similarity to P49205 (PID:c	5.87	1.71
37	40038843	unnamed protein product [Homo sapiens]	4.31	7.72
38	40037705	unnamed protein product [Homo sapiens]	1.51	4.29
39	40037540	unnamed protein product [Homo sapiens]	2.15	2.48
40	40037234	unnamed protein product [Homo sapiens]	2.06	16.22
41	40035594	unnamed protein product [Homo sapiens]	4.30	3.86
42	40035148	unnamed protein product [Homo sapiens]	2.52	16.50
43	40034191	unnamed protein product [Homo sapiens]	4.26	3.92
44	40032318	unnamed protein product [Homo sapiens]	2.57	14.93
45	40032084	unnamed protein product [Homo sapiens]	2.67	3.45
46	40031121	unnamed protein product [Homo sapiens]	1.50	1.65
47	40030670	unnamed protein product [Homo sapiens]	2.08	6.56
48	39722653	unnamed protein product [Homo sapiens]	5.04	2.48
49	38502079	OPK VI-weel/mi1 family [Homo sapiens]	5.95	1.53
50	38502045	CaMK II KIN1/SNFI/Nim1 family [Homo sapiens]	4.42	3.34
51	38502003	AGC I Cyclic nucleotide regulated protein kinase family [Homo sapie	2.17	1.45
52	33352800	L1 cell adhesion molecule [Homo sapiens]	2.67	19.28
53	31338696	immunoglobulin gamma heavy chain variable region [Homo sapiens]	2.55	15.50
54	29161458	unnamed protein product [Homo sapiens]	4.18	3.19
55	28800861	unnamed protein product [Homo sapiens]	2.13	12.22
56	28800447	unnamed protein product [Homo sapiens]	4.54	14.57
57	28799826	unnamed protein product [Homo sapiens]	2.51	14.01
58	23343183	unnamed protein product [Homo sapiens]	6.15	1.79
59	21739444	hypothetical protein [Homo sapiens]	2.07	2.95
60	21439304	unnamed protein product [Homo sapiens]	2.05	5.19

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2	21336432	unnamed protein product [Homo sapiens]	2.02	3.33
3	21336348	unnamed protein product [Homo sapiens]	4.41	2.45
4	19773321	immunoglobulin heavy chain variable region [Homo sapiens]	4.63	10.87
5	18617760	unnamed protein product [Homo sapiens]	7.15	4.49
6	12655593	immunoglobulin lambda chain variable region [Homo sapiens]	3.06	19.27
7	14589165	immunoglobulin heavy chain variable region [Homo sapiens]	2.12	18.68
8	12733986	immunoglobulin gamma heavy chain variable region [Homo sapiens]	2.56	27.27
9	11121485	immunoglobulin heavy chain variable region [Homo sapiens]	3.83	13.77
10	5051248	immunoglobulin gamma heavy chain variable region [Homo sapiens]	2.34	12.07
11	6482350	CAC-1 [Homo sapiens]	5.43	13.46
12	1617094	heavy chain of IgD variable region [Homo sapiens]	20.08	14.06
13	1200067	immunoglobulin heavy chain [Homo sapiens]	2.03	19.13
14	2896033	PCF11p homolog [Homo sapiens]	7.12	1.38
15	226343	beta amyloid peptide precursor	3.63	3.83
16	1235763	immunoglobulin heavy chain V-D-J region [Homo sapiens]	4.05	7.32
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For Peer Review

	# Proteins	# Unique Peptides	# Peptides	# PSMs	Molecular Function	Cellular Component
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8	354	23	24	68		
9	16	16	17	938		
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11	30	13	14	14		
12	128	13	24	33		
13	17	12	12	114		
14	73	12	35	115		
15	15	12	12	14		
16	16	12	16	245		
17	35	12	12	12		
18	12	11	11	13		
19	21	11	11	11		
20	56	11	11	14		
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37	16	6	6	6		
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5	6	1	2	3		
6	1	1	1	1		
7	1	1	1	1		
8	1	1	1	1		
9	1	1	1	1		
10	1	1	1	1		
11	2	1	1	2		
12	1	1	1	9		
13	1	1	1	1		
14	7	1	1	4		
15	22	1	2	2		
16	3	1	1	2		

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Biological Process	Pfam IDs	# AAs	MW [kDa]	calc. pI
	Retrival Error	1960	226.4	5.60
	Retrival Error	645	65.8	8.00
	Retrival Error	4684	531.5	5.96
	Retrival Error	646	70.9	5.52
	Retrival Error	623	62.0	5.24
	Retrival Error	440	47.7	5.22
	Retrival Error	231	24.3	7.91
	Retrival Error	547	58.6	7.72
	Retrival Error	339	38.6	7.75
	Retrival Error	34942	3878.8	6.38
	Retrival Error	213	23.3	8.29
	Retrival Error	624	63.3	5.21
	Retrival Error	707	76.3	4.69
	Retrival Error	458	50.6	6.67
	Retrival Error	2388	261.2	8.47
	Retrival Error	624	69.6	6.44
	Retrival Error	1639	187.8	5.69
	Retrival Error	518	56.5	7.83
	Retrival Error	569	60.6	6.04
	Retrival Error	665	72.4	5.94
	Retrival Error	2427	279.3	5.36
	Retrival Error	473	51.2	5.05
	Retrival Error	285	33.7	9.36
	Retrival Error	293	31.5	7.61
	Retrival Error	416	46.3	5.08
	Retrival Error	530	56.8	6.87
	Retrival Error	217	24.8	9.94
	Retrival Error	596	68.2	5.85
	Retrival Error	242	26.5	9.66
	Retrival Error	721	79.7	5.99
	Retrival Error	2578	275.5	5.81
	Retrival Error	414	46.4	7.47
	Retrival Error	152	17.7	10.99
	Retrival Error	2315	245.7	5.97
	Retrival Error	192	20.7	6.87
	Retrival Error	6907	780.1	6.71
	Retrival Error	4236	485.7	6.35
	Retrival Error	333	37.6	11.03
	Retrival Error	622	69.8	6.55
	Retrival Error	398	45.4	10.15
	Retrival Error	650	74.7	5.14
	Retrival Error	221	24.2	9.79
	Retrival Error	1173	138.3	6.55
	Retrival Error	858	95.3	6.83
	Retrival Error	618	67.5	5.50
	Retrival Error	164	17.9	7.81
	Retrival Error	129	14.4	10.23
	Retrival Error	419	47.3	8.92
	Retrival Error	266	30.1	10.74
	Retrival Error	389	44.6	6.47
	Retrival Error	248	29.2	10.65
	Retrival Error	466	53.7	5.10
	Retrival Error	218	23.6	10.92
	Retrival Error	280	30.9	4.84
	Retrival Error	732	84.6	5.02
	Retrival Error	260	31.2	9.06
	Retrival Error	278	29.7	5.68
	Retrival Error	1382	166.4	6.79

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2	Retrival Error	1262	144.4	6.04
3	Retrival Error	5890	628.7	6.15
4	Retrival Error	2272	260.0	6.96
5	Retrival Error	135	15.5	9.85
6	Retrival Error	307	34.9	9.57
7	Retrival Error	300	33.3	5.07
8	Retrival Error	958	96.7	5.62
9	Retrival Error	441	47.8	9.03
10	Retrival Error	178	20.5	10.52
11	Retrival Error	472	51.6	5.16
12	Retrival Error	314	35.0	7.78
13	Retrival Error	170	19.4	10.26
14	Retrival Error	6391	740.0	9.11
15	Retrival Error	518	59.6	7.24
16	Retrival Error	151	16.3	10.89
17	Retrival Error	2801	308.6	9.51
18	Retrival Error	124	13.6	9.99
19	Retrival Error	415	46.5	4.93
20	Retrival Error	669	74.2	8.54
21	Retrival Error	522	58.2	5.29
22	Retrival Error	211	24.3	11.65
23	Retrival Error	550	60.8	7.55
24	Retrival Error	247	28.4	10.84
25	Retrival Error	258	29.3	9.77
26	Retrival Error	746	81.7	7.55
27	Retrival Error	362	40.2	7.88
28	Retrival Error	166	18.5	8.09
29	Retrival Error	248	27.9	8.46
30	Retrival Error	158	18.4	10.30
31	Retrival Error	151	16.3	10.05
32	Retrival Error	2017	223.6	8.75
33	Retrival Error	6825	788.0	5.47
34	Retrival Error	1300	149.5	5.71
35	Retrival Error	4471	514.5	5.88
36	Retrival Error	267	29.4	9.14
37	Retrival Error	947	106.6	6.47
38	Retrival Error	164	19.3	11.93
39	Retrival Error	2266	252.3	6.60
40	Retrival Error	1011	111.7	6.76
41	Retrival Error	3184	367.2	5.02
42	Retrival Error	363	39.3	8.09
43	Retrival Error	523	56.7	8.41
44	Retrival Error	217	23.3	6.90
45	Retrival Error	2083	244.4	5.34
46	Retrival Error	336	36.3	6.90
47	Retrival Error	3562	412.2	5.86
48	Retrival Error	846	93.8	4.77
49	Retrival Error	115	13.0	11.00
50	Retrival Error	4033	458.5	7.08
51	Retrival Error	1349	152.0	9.42
52	Retrival Error	6616	720.7	5.81
53	Retrival Error	780	87.7	5.17
54	Retrival Error	3528	394.8	9.19
55	Retrival Error	426	47.6	5.02
56	Retrival Error	705	78.3	7.27
57	Retrival Error	201	23.4	10.93
58	Retrival Error	465	53.2	6.40
59	Retrival Error	593	66.7	5.63
60	Retrival Error	223	25.1	10.99

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	Retrival Error	2467	283.5	6.48
	Retrival Error	230	26.3	5.06
	Retrival Error	489	54.4	5.68
	Retrival Error	134	14.1	10.26
	Retrival Error	833	92.5	5.44
	Retrival Error	284	33.1	4.79
	Retrival Error	445	48.1	5.07
	Retrival Error	2334	258.2	6.60
	Retrival Error	145	17.2	10.55
	Retrival Error	1941	222.9	5.82
	Retrival Error	3396	372.6	4.51
	Retrival Error	119	13.4	9.94
	Retrival Error	325	36.5	5.64
	Retrival Error	724	83.5	6.16
	Retrival Error	376	41.8	5.48
	Retrival Error	762	83.7	4.74
	Retrival Error	148	16.8	9.38
	Retrival Error	51	5.6	10.13
	Retrival Error	439	49.6	9.03
	Retrival Error	145	16.1	10.32
	Retrival Error	2488	268.0	9.03
	Retrival Error	221	22.3	11.02
	Retrival Error	644	66.0	8.12
	Retrival Error	151	17.2	10.54
	Retrival Error	1257	144.7	6.74
	Retrival Error	1261	138.8	7.24
	Retrival Error	924	107.5	7.99
	Retrival Error	201	23.3	8.24
	Retrival Error	1951	221.3	5.72
	Retrival Error	1185	132.3	5.74
	Retrival Error	909	105.1	7.93
	Retrival Error	283	31.3	6.99
	Retrival Error	188	19.6	8.03
	Retrival Error	507	56.4	6.49
	Retrival Error	688	78.6	8.84
	Retrival Error	460	52.8	7.44
	Retrival Error	1873	210.7	6.20
	Retrival Error	398	44.8	8.18
	Retrival Error	1659	190.4	7.62
	Retrival Error	2002	226.5	6.20
	Retrival Error	4427	507.4	6.37
	Retrival Error	877	99.0	5.16
	Retrival Error	132	14.2	8.65
	Retrival Error	2608	276.8	8.81
	Retrival Error	863	96.1	8.35
	Retrival Error	139	16.6	11.06
	Retrival Error	920	104.9	6.10
	Retrival Error	3507	399.6	6.93
	Retrival Error	158	17.6	4.86
	Retrival Error	202	22.8	8.50
	Retrival Error	196	22.0	5.63
	Retrival Error	94	10.7	8.72
	Retrival Error	241	26.7	8.15
	Retrival Error	448	49.5	6.19
	Retrival Error	442	50.3	7.99
	Retrival Error	498	54.9	10.07
	Retrival Error	498	57.0	6.83
	Retrival Error	291	33.1	9.29
	Retrival Error	316	36.5	6.37

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2	Retrival Error	2458	267.9	7.83
3	Retrival Error	352	38.9	4.94
4	Retrival Error	4462	509.0	5.72
5	Retrival Error	182	21.2	7.34
6	Retrival Error	126	13.7	7.30
7	Retrival Error	956	107.8	8.48
8	Retrival Error	99	11.2	9.44
9	Retrival Error	113	12.0	8.94
10	Retrival Error	1450	160.7	6.37
11	Retrival Error	616	69.8	8.46
12	Retrival Error	284	31.2	9.32
13	Retrival Error	539	58.5	6.09
14	Retrival Error	2352	264.9	6.11
15	Retrival Error	874	95.4	5.73
16	Retrival Error	1976	228.8	5.54
17	Retrival Error	563	64.6	5.87
18	Retrival Error	214	23.6	8.29
19	Retrival Error	6929	784.5	8.88
20	Retrival Error	486	54.4	8.98
21	Retrival Error	116	13.4	10.20
22	Retrival Error	578	68.0	7.94
23	Retrival Error	1156	127.3	5.63
24	Retrival Error	1257	140.7	6.96
25	Retrival Error	129	14.5	5.91
26	Retrival Error	426	46.1	6.54
27	Retrival Error	2342	256.6	4.78
28	Retrival Error	301	32.5	8.72
29	Retrival Error	805	88.8	6.92
30	Retrival Error	135	15.2	9.44
31	Retrival Error	3674	416.6	6.67
32	Retrival Error	1647	184.1	5.54
33	Retrival Error	2349	265.4	5.07
34	Retrival Error	772	89.2	5.20
35	Retrival Error	599	68.2	6.02
36	Retrival Error	251	27.6	9.57
37	Retrival Error	397	46.4	8.31
38	Retrival Error	1641	186.7	6.84
39	Retrival Error	606	67.1	9.89
40	Retrival Error	872	98.2	7.65
41	Retrival Error	2330	261.7	7.58
42	Retrival Error	1310	145.5	5.22
43	Retrival Error	2884	324.6	6.79
44	Retrival Error	4919	535.9	6.30
45	Retrival Error	231	26.1	9.99
46	Retrival Error	1019	110.0	9.29
47	Retrival Error	38	4.5	10.54
48	Retrival Error	4024	460.8	5.99
49	Retrival Error	1254	141.6	6.55
50	Retrival Error	184	21.4	10.20
51	Retrival Error	393	43.7	6.95
52	Retrival Error	539	58.7	6.34
53	Retrival Error	418	47.4	6.71
54	Retrival Error	963	107.8	5.67
55	Retrival Error	1066	119.1	6.62
56	Retrival Error	1752	202.0	7.55
57	Retrival Error	171	20.0	9.42
58	Retrival Error	406	46.0	8.34
59	Retrival Error	117	12.9	6.15
60	Retrival Error	1008	113.4	9.77

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Retrival Error	270	29.9	7.85
Retrival Error	439	48.5	5.92
Retrival Error	900	101.2	7.40
Retrival Error	275	30.5	7.66
Retrival Error	470	53.6	5.47
Retrival Error	406	47.6	8.69
Retrival Error	327	36.8	9.23
Retrival Error	254	28.7	5.71
Retrival Error	627	71.5	8.62
Retrival Error	266	29.4	10.23
Retrival Error	512	58.7	5.58
Retrival Error	524	57.0	5.55
Retrival Error	2992	340.2	6.16
Retrival Error	424	48.5	5.69
Retrival Error	1340	150.9	8.22
Retrival Error	1033	119.4	6.98
Retrival Error	1268	143.5	6.58
Retrival Error	471	52.5	8.51
Retrival Error	2187	245.6	5.15
Retrival Error	2093	229.8	7.34
Retrival Error	2252	248.2	5.83
Retrival Error	104	12.7	11.93
Retrival Error	1714	175.4	8.27
Retrival Error	156	17.9	9.60
Retrival Error	426	48.6	7.18
Retrival Error	250	27.0	7.69
Retrival Error	246	28.0	7.42
Retrival Error	408	44.4	9.39
Retrival Error	174	20.2	8.50
Retrival Error	2022	228.5	9.29
Retrival Error	2504	272.9	6.67
Retrival Error	593	66.8	7.75
Retrival Error	490	55.9	5.16
Retrival Error	1857	214.2	5.54
Retrival Error	472	53.4	8.59
Retrival Error	367	42.3	8.63
Retrival Error	3929	441.5	7.46
Retrival Error	715	79.6	9.35
Retrival Error	570	65.0	8.29
Retrival Error	798	88.3	8.82
Retrival Error	593	67.4	7.71
Retrival Error	698	80.4	7.74
Retrival Error	812	93.5	5.69
Retrival Error	367	40.7	5.69
Retrival Error	198	22.2	10.76
Retrival Error	50	5.9	9.70
Retrival Error	143	16.7	10.52
Retrival Error	124	14.8	6.39
Retrival Error	301	34.0	8.05
Retrival Error	950	108.7	7.12
Retrival Error	529	59.1	6.95
Retrival Error	255	29.1	5.00
Retrival Error	442	50.4	6.39
Retrival Error	127	14.6	9.60
Retrival Error	298	34.2	9.85
Retrival Error	366	42.3	8.69
Retrival Error	495	56.7	7.75
Retrival Error	7723	875.9	5.26
Retrival Error	340	40.0	6.02

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2	Retrival Error	1839	201.3	6.62
3	Retrival Error	554	64.1	6.42
4	Retrival Error	117	12.6	7.96
5	Retrival Error	106	11.4	7.28
6	Retrival Error	1366	155.7	6.54
7	Retrival Error	2715	298.2	5.48
8	Retrival Error	232	26.6	5.02
9	Retrival Error	150	17.8	5.73
10	Retrival Error	1218	133.5	9.64
11	Retrival Error	527	61.8	7.81
12	Retrival Error	440	49.2	5.96
13	Retrival Error	162	17.4	5.14
14	Retrival Error	209	22.5	10.23
15	Retrival Error	322	35.9	8.06
16	Retrival Error	1189	134.8	5.92
17	Retrival Error	1628	180.5	6.93
18	Retrival Error	468	51.2	7.20
19	Retrival Error	585	63.6	7.24
20	Retrival Error	1043	115.0	6.58
21	Retrival Error	568	65.5	8.94
22	Retrival Error	2436	270.5	5.53
23	Retrival Error	373	42.8	5.21
24	Retrival Error	1978	227.4	5.30
25	Retrival Error	1909	210.6	8.78
26	Retrival Error	265	30.3	9.14
27	Retrival Error	399	45.0	7.58
28	Retrival Error	1198	136.3	8.59
29	Retrival Error	1230	140.1	6.80
30	Retrival Error	410	48.5	7.93
31	Retrival Error	331	38.2	5.44
32	Retrival Error	1385	155.7	7.20
33	Retrival Error	396	45.2	6.76
34	Retrival Error	433	46.9	9.11
35	Retrival Error	530	61.0	9.74
36	Retrival Error	2367	257.2	5.71
37	Retrival Error	884	102.2	5.44
38	Retrival Error	165	18.4	6.18
39	Retrival Error	264	30.4	8.95
40	Retrival Error	1163	127.4	9.31
41	Retrival Error	677	74.2	6.19
42	Retrival Error	93	10.8	7.03
43	Retrival Error	185	21.4	5.44
44	Retrival Error	1017	114.2	7.34
45	Retrival Error	131	14.7	5.10
46	Retrival Error	539	61.3	6.39
47	Retrival Error	378	44.4	5.25
48	Retrival Error	1116	126.8	7.17
49	Retrival Error	847	94.6	6.25
50	Retrival Error	148	16.4	8.46
51	Retrival Error	233	24.5	6.05
52	Retrival Error	315	35.1	4.53
53	Retrival Error	253	27.1	10.14
54	Retrival Error	502	56.7	6.95
55	Retrival Error	156	17.7	9.33
56	Retrival Error	244	26.6	9.33
57	Retrival Error	150	16.4	9.77
58	Retrival Error	1830	211.8	6.87
59	Retrival Error	1363	151.3	7.80
60	Retrival Error	1010	107.7	6.70



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Retrival Error	10	1.0	4.50
Retrival Error	68	7.3	9.85
Retrival Error	196	21.4	9.96
Retrival Error	351	39.0	6.16
Retrival Error	957	109.4	6.19
Retrival Error	168	18.8	9.86
Retrival Error	138	14.9	8.72
Retrival Error	513	57.9	6.29
Retrival Error	124	13.4	9.50
Retrival Error	377	43.1	4.92
Retrival Error	62	7.5	8.47
Retrival Error	481	52.0	8.68
Retrival Error	2139	238.0	5.33
Retrival Error	904	103.3	7.18
Retrival Error	191	21.8	8.84
Retrival Error	800	92.5	9.17
Retrival Error	108	12.2	9.36
Retrival Error	251	27.5	8.25
Retrival Error	327	35.1	7.21
Retrival Error	216	23.7	8.07
Retrival Error	329	36.3	7.23
Retrival Error	410	45.0	5.20
Retrival Error	221	23.8	10.54
Retrival Error	442	52.6	8.88
Retrival Error	320	33.3	6.47
Retrival Error	139	13.2	11.41
Retrival Error	374	43.8	5.36
Retrival Error	436	50.2	9.07
Retrival Error	154	16.5	11.90
Retrival Error	369	41.4	5.05
Retrival Error	158	16.4	7.20
Retrival Error	67	7.5	5.97
Retrival Error	225	24.7	4.67
Retrival Error	1058	118.2	4.94
Retrival Error	139	15.4	6.40
Retrival Error	108	12.8	5.29
Retrival Error	405	44.5	5.39
Retrival Error	457	52.5	8.50
Retrival Error	1333	146.3	7.66
Retrival Error	259	29.9	7.06
Retrival Error	298	32.8	9.74
Retrival Error	582	66.9	9.55
Retrival Error	1352	146.6	9.22
Retrival Error	247	28.0	9.70
Retrival Error	312	34.4	7.37
Retrival Error	249	28.3	8.37
Retrival Error	1053	112.1	8.13
Retrival Error	330	37.7	9.22
Retrival Error	1483	166.7	9.28
Retrival Error	221	25.5	6.52
Retrival Error	716	83.2	9.61
Retrival Error	160	18.5	8.51
Retrival Error	1995	227.7	5.60
Retrival Error	516	56.9	6.04
Retrival Error	396	45.7	5.62
Retrival Error	343	38.0	8.60
Retrival Error	132	14.4	8.29
Retrival Error	450	49.3	5.08
Retrival Error	1136	131.9	9.38

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2	Retrival Error	605	64.7	9.48
3	Retrival Error	278	30.5	7.91
4	Retrival Error	167	19.0	9.45
5	Retrival Error	115	13.3	5.34
6	Retrival Error	1183	131.4	9.04
7	Retrival Error	594	67.8	5.17
8	Retrival Error	615	66.5	7.53
9	Retrival Error	124	14.6	6.13
10	Retrival Error	45	5.1	11.62
11	Retrival Error	1295	143.2	7.33
12	Retrival Error	291	33.2	6.37
13	Retrival Error	730	80.7	8.68
14	Retrival Error	867	98.4	6.64
15	Retrival Error	465	51.7	7.21
16	Retrival Error	951	110.4	6.47
17	Retrival Error	197	21.9	9.55
18	Retrival Error	109	12.1	4.27
19	Retrival Error	669	76.6	7.39
20	Retrival Error	274	30.1	9.57
21	Retrival Error	632	72.6	6.34
22	Retrival Error	113	12.3	10.74
23	Retrival Error	242	26.4	8.10
24	Retrival Error	265	29.7	9.23
25	Retrival Error	139	15.4	9.52
26	Retrival Error	120	14.1	9.47
27	Retrival Error	299	32.5	8.16
28	Retrival Error	200	22.0	11.08
29	Retrival Error	143	16.1	7.64
30	Retrival Error	61	7.3	9.73
31	Retrival Error	164	18.2	5.50
32	Retrival Error	86	8.8	8.25
33	Retrival Error	733	82.6	7.97
34	Retrival Error	1460	161.3	7.01
35	Retrival Error	662	69.1	7.75
36	Retrival Error	604	68.3	9.48
37	Retrival Error	397	46.2	5.92
38	Retrival Error	341	39.5	9.51
39	Retrival Error	204	23.3	9.92
40	Retrival Error	165	18.4	9.32
41	Retrival Error	178	18.7	7.39
42	Retrival Error	195	21.1	8.18
43	Retrival Error	552	55.6	9.48
44	Retrival Error	232	26.6	9.36
45	Retrival Error	620	69.2	6.43
46	Retrival Error	127	13.7	10.35
47	Retrival Error	1293	141.4	8.02
48	Retrival Error	150	16.9	10.67
49	Retrival Error	447	50.1	4.89
50	Retrival Error	299	34.9	5.02
51	Retrival Error	255	29.1	9.76
52	Retrival Error	785	87.4	6.83
53	Retrival Error	465	54.0	9.83
54	Retrival Error	420	47.9	7.90
55	Retrival Error	1075	121.2	6.21
56	Retrival Error	58	5.8	9.09
57	Retrival Error	535	59.2	8.13
58	Retrival Error	210	24.2	9.66
59	Retrival Error	2752	299.4	12.06
60	Retrival Error	2137	246.3	5.27

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	Retrival Error	218	25.0	7.15
	Retrival Error	67	7.7	5.35
	Retrival Error	307	35.7	5.03
	Retrival Error	122	14.4	5.17
	Retrival Error	428	48.1	5.62
	Retrival Error	302	33.6	6.96
	Retrival Error	155	16.1	6.13
	Retrival Error	102	11.4	6.95
	Retrival Error	555	58.8	5.97
	Retrival Error	334	38.1	9.39
	Retrival Error	754	83.6	5.90
	Retrival Error	150	16.7	6.90
	Retrival Error	1368	151.8	7.14
	Retrival Error	215	22.6	8.59
	Retrival Error	474	52.2	7.12
	Retrival Error	526	58.3	6.95
	Retrival Error	1163	124.2	8.72
	Retrival Error	1272	141.3	5.41
	Retrival Error	400	45.2	5.67
	Retrival Error	600	69.0	7.08
	Retrival Error	215	22.9	7.46
	Retrival Error	233	25.5	9.06
	Retrival Error	412	45.0	8.57
	Retrival Error	240	28.0	8.13
	Retrival Error	391	44.6	9.14
	Retrival Error	5695	605.3	5.36
	Retrival Error	727	83.0	7.46
	Retrival Error	166	18.0	9.26
	Retrival Error	243	28.2	7.49
	Retrival Error	439	47.7	6.64
	Retrival Error	446	50.9	6.68
	Retrival Error	179	20.9	8.22
	Retrival Error	643	72.0	9.52
	Retrival Error	155	17.6	5.31
	Retrival Error	179	21.0	9.88
	Retrival Error	241	25.9	9.14
	Retrival Error	611	67.9	9.38
	Retrival Error	305	34.5	5.72
	Retrival Error	485	55.5	4.97
	Retrival Error	224	24.1	8.88
	Retrival Error	324	37.5	8.90
	Retrival Error	259	28.8	5.36
	Retrival Error	186	21.2	4.39
	Retrival Error	896	102.1	6.52
	Retrival Error	243	25.4	7.06
	Retrival Error	229	26.1	7.81
	Retrival Error	373	43.2	9.06
	Retrival Error	685	79.5	7.75
	Retrival Error	396	43.1	4.87
	Retrival Error	123	14.2	9.94
	Retrival Error	301	33.8	9.92
	Retrival Error	285	32.9	6.62
	Retrival Error	284	31.3	9.73
	Retrival Error	227	25.9	9.17
	Retrival Error	265	29.2	7.91
	Retrival Error	433	46.3	8.97
	Retrival Error	269	29.7	9.07
	Retrival Error	221	24.4	9.38
	Retrival Error	372	40.5	9.66

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2	Retrival Error	222	24.6	8.44
3	Retrival Error	257	29.0	8.82
4	Retrival Error	844	94.6	6.81
5	Retrival Error	63	6.9	9.42
6	Retrival Error	801	91.2	6.83
7	Retrival Error	464	52.4	8.66
8	Retrival Error	331	36.2	8.48
9	Retrival Error	77	8.2	9.92
10	Retrival Error	334	36.7	5.14
11	Retrival Error	224	24.0	10.87
12	Retrival Error	304	35.3	5.25
13	Retrival Error	148	15.8	10.58
14	Retrival Error	443	48.9	7.66
15	Retrival Error	826	87.2	5.40
16	Retrival Error	58	6.6	10.45
17	Retrival Error	942	107.5	7.61
18	Retrival Error	1213	137.3	7.93
19	Retrival Error	143	17.3	6.61
20	Retrival Error	32	3.8	4.51
21	Retrival Error	397	44.6	4.93
22	Retrival Error	323	34.2	8.10
23	Retrival Error	354	40.2	5.22
24	Retrival Error	143	16.3	9.20
25	Retrival Error	2715	303.3	7.36
26	Retrival Error	173	19.2	7.43
27	Retrival Error	709	80.5	8.72
28	Retrival Error	4700	516.0	6.32
29	Retrival Error	103	12.6	9.73
30	Retrival Error	343	38.8	5.94
31	Retrival Error	145	16.8	7.01
32	Retrival Error	80	9.1	5.83
33	Retrival Error	396	44.2	5.06
34	Retrival Error	432	48.7	7.81
35	Retrival Error	365	41.6	8.92
36	Retrival Error	993	109.7	8.79
37	Retrival Error	400	45.1	6.68
38	Retrival Error	431	46.4	6.47
39	Retrival Error	247	28.3	7.62
40	Retrival Error	186	21.9	8.87
41	Retrival Error	173	20.1	5.66
42	Retrival Error	648	71.7	8.25
43	Retrival Error	232	27.2	8.38
44	Retrival Error	193	22.4	6.80
45	Retrival Error	381	43.8	7.78
46	Retrival Error	727	83.7	6.96
47	Retrival Error	160	17.6	10.07
48	Retrival Error	547	60.7	9.14
49	Retrival Error	296	34.7	4.34
50	Retrival Error	228	26.1	5.72
51	Retrival Error	943	107.2	5.74
52	Retrival Error	163	18.7	9.42
53	Retrival Error	938	103.5	5.35
54	Retrival Error	256	28.5	4.91
55	Retrival Error	79	8.7	8.21
56	Retrival Error	820	90.4	7.30
57	Retrival Error	629	70.2	5.53
58	Retrival Error	475	53.5	5.25
59	Retrival Error	240	27.5	5.94
60	Retrival Error	146	16.6	6.13

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Retrival Error	167	19.6	10.13
Retrival Error	655	72.4	5.16
Retrival Error	118	13.7	10.59
Retrival Error	2400	252.1	4.45
Retrival Error	874	99.3	8.73
Retrival Error	229	24.8	7.94
Retrival Error	1194	135.1	6.07
Retrival Error	1010	118.1	8.15
Retrival Error	383	42.1	4.94
Retrival Error	2012	227.8	6.21
Retrival Error	139	16.1	10.46
Retrival Error	215	25.1	9.10
Retrival Error	90	9.8	5.91
Retrival Error	1230	138.3	7.52
Retrival Error	212	24.3	5.81
Retrival Error	622	70.4	7.15
Retrival Error	306	34.7	8.98
Retrival Error	299	32.3	7.93
Retrival Error	73	7.9	8.79
Retrival Error	224	24.0	7.55
Retrival Error	141	15.6	5.29
Retrival Error	207	23.6	7.44
Retrival Error	435	48.4	7.46
Retrival Error	199	22.9	6.61
Retrival Error	333	36.5	6.05
Retrival Error	618	70.0	5.81
Retrival Error	47	5.5	10.87
Retrival Error	299	33.9	5.58
Retrival Error	204	22.5	5.48
Retrival Error	116	12.9	9.45
Retrival Error	357	39.7	6.27
Retrival Error	69	7.9	9.63
Retrival Error	246	28.0	6.47
Retrival Error	263	29.5	5.21
Retrival Error	245	28.2	4.91
Retrival Error	159	18.8	6.79
Retrival Error	246	26.4	6.90
Retrival Error	304	35.2	6.99
Retrival Error	135	15.4	6.89
Retrival Error	433	49.0	7.12
Retrival Error	78	8.3	9.00
Retrival Error	95	10.0	6.76
Retrival Error	497	56.5	7.20
Retrival Error	124	13.6	10.84
Retrival Error	214	23.4	8.05
Retrival Error	69	7.1	4.55
Retrival Error	478	52.9	9.26
Retrival Error	12	1.3	9.00
Retrival Error	15	1.6	7.18
Retrival Error	121	12.9	7.97
Retrival Error	515	59.0	6.14
Retrival Error	100	10.9	8.46
Retrival Error	835	94.1	6.48
Retrival Error	20	2.3	4.46
Retrival Error	148	16.6	6.06
Retrival Error	444	49.8	4.78
Retrival Error	2311	249.9	10.07
Retrival Error	224	24.1	8.50
Retrival Error	557	63.8	8.87

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2	Retrival Error	197	22.5	4.70
3	Retrival Error	66	7.2	7.52
4	Retrival Error	181	19.9	6.62
5	Retrival Error	366	39.2	7.06
6	Retrival Error	476	52.2	8.70
7	Retrival Error	190	21.9	6.07
8	Retrival Error	338	37.6	5.76
9	Retrival Error	1543	175.6	6.65
10	Retrival Error	1704	191.3	7.62
11	Retrival Error	39	4.7	4.55
12	Retrival Error	219	24.7	6.39
13	Retrival Error	70	7.9	8.92
14	Retrival Error	188	22.2	5.83
15	Retrival Error	392	42.4	6.14
16	Retrival Error	4346	463.7	6.51
17	Retrival Error	694	76.3	8.35
18	Retrival Error	2285	261.8	6.24
19	Retrival Error	1505	163.8	7.47
20	Retrival Error	378	41.7	8.59
21	Retrival Error	719	82.0	8.73
22	Retrival Error	736	81.2	6.32
23	Retrival Error	873	98.0	6.80
24	Retrival Error	363	41.4	8.21
25	Retrival Error	351	39.5	7.74
26	Retrival Error	389	44.1	7.49
27	Retrival Error	520	55.4	6.02
28	Retrival Error	227	24.9	9.35
29	Retrival Error	147	16.1	5.48
30	Retrival Error	599	66.5	5.00
31	Retrival Error	206	24.0	8.81
32	Retrival Error	481	52.8	8.57
33	Retrival Error	416	46.8	8.70
34	Retrival Error	427	46.3	8.59
35	Retrival Error	536	60.8	7.01
36	Retrival Error	152	16.9	9.48
37	Retrival Error	141	16.3	7.80
38	Retrival Error	947	110.7	6.71
39	Retrival Error	269	31.8	9.22
40	Retrival Error	313	36.6	5.33
41	Retrival Error	500	55.0	7.99
42	Retrival Error	65	7.5	10.93
43	Retrival Error	112	12.5	9.35
44	Retrival Error	328	36.3	8.35
45	Retrival Error	166	18.3	6.67
46	Retrival Error	107	12.1	5.49
47	Retrival Error	365	40.8	6.24
48	Retrival Error	130	14.3	8.65
49	Retrival Error	200	22.6	4.86
50	Retrival Error	298	33.6	6.43
51	Retrival Error	113	12.9	9.16
52	Retrival Error	427	49.4	6.90
53	Retrival Error	5604	631.3	5.73
54	Retrival Error	226	25.8	6.21
55	Retrival Error	116	13.1	10.24
56	Retrival Error	280	30.9	7.85
57	Retrival Error	1732	190.7	7.84
58	Retrival Error	451	50.5	7.61
59	Retrival Error	132	14.5	7.50
60	Retrival Error	262	30.3	9.48

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	Retrival Error	1284	145.8	8.72
	Retrival Error	1313	146.2	8.13
	Retrival Error	670	72.9	7.03
	Retrival Error	351	38.2	8.22
	Retrival Error	358	37.7	5.00
	Retrival Error	107	12.2	7.30
	Retrival Error	110	12.0	8.07
	Retrival Error	353	39.3	7.24
	Retrival Error	83	9.2	10.29
	Retrival Error	434	42.2	5.67
	Retrival Error	59	6.9	11.82
	Retrival Error	473	50.5	8.19
	Retrival Error	1048	116.9	6.67
	Retrival Error	348	38.6	9.63
	Retrival Error	85	9.5	6.73
	Retrival Error	3396	371.4	6.30
	Retrival Error	343	38.4	8.70
	Retrival Error	194	19.0	6.77
	Retrival Error	996	109.6	5.21
	Retrival Error	441	51.0	6.74
	Retrival Error	733	80.9	7.55
	Retrival Error	104	11.7	8.32
	Retrival Error	63	7.5	10.39
	Retrival Error	95	11.0	8.62
	Retrival Error	172	19.3	7.42
	Retrival Error	108	13.1	10.11
	Retrival Error	83	9.3	11.49
	Retrival Error	141	15.6	9.44
	Retrival Error	114	13.1	7.28
	Retrival Error	190	20.2	6.76
	Retrival Error	133	15.2	10.14
	Retrival Error	872	95.6	6.16
	Retrival Error	118	13.0	11.91
	Retrival Error	1163	132.4	6.58
	Retrival Error	304	33.5	7.83
	Retrival Error	48	5.7	4.54
	Retrival Error	1196	134.7	5.87
	Retrival Error	103	11.6	4.53
	Retrival Error	549	61.8	6.29
	Retrival Error	248	26.9	9.54
	Retrival Error	218	23.8	5.34
	Retrival Error	96	11.0	6.51
	Retrival Error	440	50.5	9.16
	Retrival Error	147	16.6	10.74
	Retrival Error	132	14.6	12.06
	Retrival Error	133	15.1	8.87
	Retrival Error	560	64.6	8.98
	Retrival Error	100	10.9	4.77
	Retrival Error	449	51.3	9.26
	Retrival Error	521	58.9	6.92
	Retrival Error	523	57.7	6.74
	Retrival Error	105	12.3	10.48
	Retrival Error	1013	114.9	6.62
	Retrival Error	144	16.9	9.39
	Retrival Error	396	46.4	6.46
	Retrival Error	975	111.1	6.95
	Retrival Error	515	58.5	6.27
	Retrival Error	167	17.8	11.71
	Retrival Error	179	19.9	7.83

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2	Retrival Error	1405	156.3	5.41
3	Retrival Error	551	60.2	9.92
4	Retrival Error	468	53.5	9.82
5	Retrival Error	143	16.5	7.78
6	Retrival Error	251	27.7	9.23
7	Retrival Error	186	18.3	7.64
8	Retrival Error	188	19.6	10.01
9	Retrival Error	1531	171.8	6.33
10	Retrival Error	371	40.5	8.85
11	Retrival Error	53	6.5	9.00
12	Retrival Error	707	81.5	8.29
13	Retrival Error	681	74.4	5.55
14	Retrival Error	493	55.4	9.54
15	Retrival Error	316	34.0	9.36
16	Retrival Error	966	106.8	7.97
17	Retrival Error	395	44.1	7.43
18	Retrival Error	215	22.7	7.91
19	Retrival Error	1677	186.3	6.95
20	Retrival Error	12622	1310.2	5.07
21	Retrival Error	138	15.5	8.63
22	Retrival Error	1120	124.2	6.60
23	Retrival Error	129	14.4	9.26
24	Retrival Error	957	104.4	7.42
25	Retrival Error	99	11.2	10.29
26	Retrival Error	301	32.0	8.34
27	Retrival Error	193	22.2	6.55
28	Retrival Error	38	4.4	10.13
29	Retrival Error	83	9.4	9.69
30	Retrival Error	214	23.6	4.92
31	Retrival Error	93	10.9	9.63
32	Retrival Error	241	26.1	11.58
33	Retrival Error	171	19.7	9.67
34	Retrival Error	318	35.6	4.61
35	Retrival Error	117	12.6	10.86
36	Retrival Error	268	30.7	5.76
37	Retrival Error	1424	160.1	8.35
38	Retrival Error	561	65.4	8.41
39	Retrival Error	272	29.7	8.48
40	Retrival Error	93	10.9	7.88
41	Retrival Error	420	43.9	7.61
42	Retrival Error	167	18.7	4.51
43	Retrival Error	331	35.1	10.26
44	Retrival Error	115	12.9	7.93
45	Retrival Error	30	3.4	10.01
46	Retrival Error	582	66.8	6.34
47	Retrival Error	1810	208.3	5.02
48	Retrival Error	239	26.5	9.73
49	Retrival Error	745	82.3	7.01
50	Retrival Error	157	17.6	9.85
51	Retrival Error	77	9.1	9.04
52	Retrival Error	496	54.5	5.05
53	Retrival Error	147	16.5	8.03
54	Retrival Error	942	101.8	6.70
55	Retrival Error	509	54.7	9.28
56	Retrival Error	701	75.8	5.91
57	Retrival Error	985	112.7	5.44
58	Retrival Error	782	89.7	9.33
59	Retrival Error	122	14.2	9.33
60	Retrival Error	302	33.6	8.69



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Retrival Error	827	93.5	8.10
Retrival Error	456	49.2	6.65
Retrival Error	92	10.3	9.36
Retrival Error	345	34.4	8.90
Retrival Error	148	15.6	7.78
Retrival Error	147	16.9	9.61
Retrival Error	1033	117.0	9.63
Retrival Error	51	5.9	11.65
Retrival Error	84	9.9	7.94
Retrival Error	21	2.3	8.84
Retrival Error	505	55.0	8.69
Retrival Error	792	86.1	4.64
Retrival Error	341	37.9	9.80
Retrival Error	594	65.4	8.38
Retrival Error	3272	372.0	6.06
Retrival Error	368	37.6	10.98
Retrival Error	1643	188.3	6.71
Retrival Error	400	44.7	9.17
Retrival Error	454	49.6	9.00
Retrival Error	2695	306.6	6.35
Retrival Error	463	50.9	5.22
Retrival Error	255	27.9	9.89
Retrival Error	221	25.6	6.29
Retrival Error	46	5.5	9.63
Retrival Error	54	6.1	6.23
Retrival Error	73	8.9	6.02
Retrival Error	750	86.9	5.74
Retrival Error	275	27.9	12.21
Retrival Error	53	5.8	9.99
Retrival Error	862	96.4	7.39
Retrival Error	841	92.7	5.52
Retrival Error	41	4.8	9.72
Retrival Error	206	24.3	9.60
Retrival Error	67	7.5	7.39
Retrival Error	80	9.7	10.59
Retrival Error	383	42.2	8.78
Retrival Error	165	18.1	9.47
Retrival Error	407	46.4	7.46
Retrival Error	1091	116.5	6.52
Retrival Error	1215	135.2	6.54
Retrival Error	115	12.9	9.70
Retrival Error	2080	233.5	6.71
Retrival Error	120	13.9	8.24
Retrival Error	228	25.4	8.41
Retrival Error	474	53.4	6.61
Retrival Error	450	50.6	7.52
Retrival Error	74	8.6	6.51
Retrival Error	116	13.2	8.73
Retrival Error	4539	487.1	6.58
Retrival Error	179	20.5	7.27
Retrival Error	106	12.0	5.26
Retrival Error	168	18.6	4.78
Retrival Error	432	49.3	6.48
Retrival Error	45	5.3	8.35
Retrival Error	307	31.7	8.18
Retrival Error	85	10.0	11.12
Retrival Error	166	18.3	9.66
Retrival Error	80	9.2	9.52
Retrival Error	1011	109.0	6.06

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2	Retrival Error	468	52.1	7.58
3	Retrival Error	90	10.2	4.59
4	Retrival Error	745	84.3	7.27
5	Retrival Error	75	8.5	5.10
6	Retrival Error	141	15.1	8.54
7	Retrival Error	1139	127.2	8.68
8	Retrival Error	95	11.1	9.50
9	Retrival Error	115	12.8	11.34
10	Retrival Error	335	37.7	9.54
11	Retrival Error	64	6.8	8.05
12	Retrival Error	284	30.9	4.39
13	Retrival Error	136	15.2	11.72
14	Retrival Error	153	17.5	7.90
15	Retrival Error	349	37.4	6.60
16	Retrival Error	1227	137.5	5.67
17	Retrival Error	1079	120.5	6.02
18	Retrival Error	364	42.0	9.48
19	Retrival Error	180	20.6	4.96
20	Retrival Error	179	20.7	8.79
21	Retrival Error	444	49.0	6.79
22	Retrival Error	706	82.4	6.29
23	Retrival Error	106	12.1	10.21
24	Retrival Error	390	42.6	5.92
25	Retrival Error	169	19.5	9.58
26	Retrival Error	74	8.4	11.66
27	Retrival Error	609	66.2	7.43
28	Retrival Error	276	30.3	5.45
29	Retrival Error	78	8.9	10.29
30	Retrival Error	329	37.6	5.34
31	Retrival Error	112	13.0	10.21
32	Retrival Error	359	42.0	7.71
33	Retrival Error	274	31.1	9.51
34	Retrival Error	324	35.4	6.93
35	Retrival Error	954	107.5	6.23
36	Retrival Error	1197	136.3	7.17
37	Retrival Error	464	53.0	9.36
38	Retrival Error	186	21.9	9.23
39	Retrival Error	1019	117.9	6.76
40	Retrival Error	327	36.0	8.13
41	Retrival Error	105	11.8	10.23
42	Retrival Error	184	20.8	7.52
43	Retrival Error	186	21.1	10.13
44	Retrival Error	492	55.6	9.32
45	Retrival Error	200	22.7	7.21
46	Retrival Error	396	42.5	9.55
47	Retrival Error	284	31.5	5.97
48	Retrival Error	409	44.7	9.67
49	Retrival Error	392	44.9	7.87
50	Retrival Error	822	94.7	5.69
51	Retrival Error	382	43.8	8.63
52	Retrival Error	606	68.9	6.35
53	Retrival Error	1415	163.5	6.21
54	Retrival Error	217	24.8	6.74
55	Retrival Error	836	93.7	7.55
56	Retrival Error	216	24.9	6.37
57	Retrival Error	555	62.6	8.06
58	Retrival Error	2210	245.5	8.03
59	Retrival Error	1509	172.7	5.12
60	Retrival Error	641	74.4	9.14

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Retrival Error	4363	488.7	6.55
Retrival Error	324	36.6	6.55
Retrival Error	752	85.7	6.16
Retrival Error	130	15.1	8.88
Retrival Error	451	52.8	5.80
Retrival Error	548	62.0	8.88
Retrival Error	335	38.9	9.25
Retrival Error	594	65.9	7.30
Retrival Error	974	110.5	6.90
Retrival Error	328	35.8	7.59
Retrival Error	116	13.0	10.52
Retrival Error	163	18.1	9.61
Retrival Error	557	64.0	8.05
Retrival Error	541	62.0	8.76
Retrival Error	394	45.5	7.24
Retrival Error	230	26.5	10.39
Retrival Error	402	45.5	8.32
Retrival Error	883	97.4	6.73
Retrival Error	202	23.8	8.47
Retrival Error	828	89.1	6.87
Retrival Error	426	47.1	8.82
Retrival Error	308	33.2	8.75
Retrival Error	234	27.3	4.89
Retrival Error	718	81.4	5.44
Retrival Error	454	49.2	6.60
Retrival Error	623	71.4	9.07
Retrival Error	273	32.1	10.39
Retrival Error	724	84.3	5.95
Retrival Error	216	22.6	7.96
Retrival Error	378	41.6	8.69
Retrival Error	563	64.4	9.50
Retrival Error	296	30.9	8.43
Retrival Error	530	60.1	8.15
Retrival Error	157	17.2	8.97
Retrival Error	379	42.9	8.24
Retrival Error	310	35.0	5.34
Retrival Error	952	103.0	8.34
Retrival Error	236	27.1	4.45
Retrival Error	643	70.9	6.14
Retrival Error	416	48.0	6.64
Retrival Error	846	95.3	5.96
Retrival Error	263	29.3	6.54
Retrival Error	382	43.2	5.73
Retrival Error	215	24.2	8.03
Retrival Error	1401	157.1	6.61
Retrival Error	317	36.0	8.73
Retrival Error	201	21.9	9.64
Retrival Error	1307	151.8	9.48
Retrival Error	367	42.8	7.53
Retrival Error	908	102.4	7.61
Retrival Error	1395	157.8	6.74
Retrival Error	449	50.8	5.38
Retrival Error	311	34.2	5.92
Retrival Error	357	41.3	9.72
Retrival Error	518	58.8	6.58
Retrival Error	267	30.5	8.29
Retrival Error	126	14.2	7.81
Retrival Error	600	69.6	7.61
Retrival Error	450	52.9	7.47

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2	Retrival Error	797	92.6	6.33
3	Retrival Error	627	70.4	5.58
4	Retrival Error	885	99.0	4.63
5	Retrival Error	362	41.5	7.56
6	Retrival Error	423	47.0	5.07
7	Retrival Error	545	58.7	6.57
8	Retrival Error	799	89.7	5.83
9	Retrival Error	168	18.9	12.31
10	Retrival Error	431	48.6	6.79
11	Retrival Error	440	47.7	5.45
12	Retrival Error	435	46.1	4.61
13	Retrival Error	373	43.2	7.96
14	Retrival Error	446	49.0	9.23
15	Retrival Error	659	73.8	4.87
16	Retrival Error	503	53.8	5.52
17	Retrival Error	249	27.4	8.31
18	Retrival Error	381	40.7	10.15
19	Retrival Error	2303	258.8	6.32
20	Retrival Error	590	67.3	10.59
21	Retrival Error	174	19.1	4.41
22	Retrival Error	707	79.7	10.74
23	Retrival Error	263	29.6	5.49
24	Retrival Error	167	17.6	7.65
25	Retrival Error	2671	292.6	7.43
26	Retrival Error	992	115.6	7.99
27	Retrival Error	1298	141.2	7.23
28	Retrival Error	1981	222.4	6.57
29	Retrival Error	1143	131.0	7.58
30	Retrival Error	161	17.0	7.11
31	Retrival Error	218	24.4	5.53
32	Retrival Error	316	32.9	5.33
33	Retrival Error	843	93.0	5.05
34	Retrival Error	507	57.7	9.23
35	Retrival Error	832	92.9	6.02
36	Retrival Error	689	79.0	10.17
37	Retrival Error	1146	122.4	6.80
38	Retrival Error	380	43.7	5.62
39	Retrival Error	1497	167.8	5.15
40	Retrival Error	201	21.9	7.71
41	Retrival Error	116	13.2	8.62
42	Retrival Error	285	33.2	6.33
43	Retrival Error	121	14.2	8.10
44	Retrival Error	253	28.7	8.24
45	Retrival Error	280	31.4	5.44
46	Retrival Error	107	11.8	7.12
47	Retrival Error	162	18.0	9.35
48	Retrival Error	653	72.1	5.14
49	Retrival Error	770	82.5	5.69
50	Retrival Error	13	1.5	9.99
51	Retrival Error	98	11.3	7.91
52	Retrival Error	358	40.9	8.84
53	Retrival Error	319	36.3	8.27
54	Retrival Error	37	3.9	4.75
55	Retrival Error	1928	211.4	7.24
56	Retrival Error	188	21.3	8.41
57	Retrival Error	454	52.7	9.60
58	Retrival Error	218	24.6	8.68
59	Retrival Error	66	7.3	5.41
60	Retrival Error	58	6.2	8.97

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Retrival Error	416	46.0	9.01
Retrival Error	489	54.4	8.28
Retrival Error	545	60.9	8.25
Retrival Error	540	59.0	6.83
Retrival Error	449	49.7	6.86
Retrival Error	342	38.5	7.40
Retrival Error	564	63.7	7.77
Retrival Error	474	54.8	9.03
Retrival Error	263	28.9	4.88
Retrival Error	531	58.4	8.31
Retrival Error	1345	148.8	7.39
Retrival Error	476	54.9	8.53
Retrival Error	509	57.6	6.70
Retrival Error	191	21.6	6.98
Retrival Error	1264	136.4	9.17
Retrival Error	1394	157.9	6.13
Retrival Error	361	41.1	9.35
Retrival Error	86	9.7	8.15
Retrival Error	8407	965.7	5.55
Retrival Error	812	96.0	9.39
Retrival Error	186	21.4	6.30
Retrival Error	1685	181.3	7.25
Retrival Error	351	38.5	8.69
Retrival Error	533	58.6	8.24
Retrival Error	997	108.8	9.19
Retrival Error	1457	165.1	6.55
Retrival Error	1151	129.9	5.25
Retrival Error	660	73.7	7.15
Retrival Error	963	106.7	7.97
Retrival Error	291	33.4	7.49
Retrival Error	126	14.1	5.33
Retrival Error	60	7.1	10.21
Retrival Error	77	8.9	7.27
Retrival Error	81	10.1	12.03
Retrival Error	305	34.3	11.99
Retrival Error	139	17.1	10.62
Retrival Error	45	5.3	11.08
Retrival Error	116	12.8	6.30
Retrival Error	108	11.8	8.73
Retrival Error	110	12.2	8.29
Retrival Error	25	2.6	9.70
Retrival Error	96	11.2	6.33
Retrival Error	57	6.3	12.22
Retrival Error	112	12.6	8.51
Retrival Error	187	19.6	7.33
Retrival Error	140	16.3	7.50
Retrival Error	126	14.0	8.44
Retrival Error	1699	193.5	6.70
Retrival Error	1037	118.0	6.39
Retrival Error	1178	128.5	7.14
Retrival Error	1894	210.9	6.52
Retrival Error	226	24.6	5.19
Retrival Error	209	23.0	7.37
Retrival Error	118	12.8	8.00
Retrival Error	530	59.6	5.36
Retrival Error	345	38.7	9.44
Retrival Error	485	56.1	9.11
Retrival Error	237	26.9	4.87
Retrival Error	396	45.1	8.73

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2	Retrival Error	283	32.7	6.46
3	Retrival Error	678	76.9	6.98
4	Retrival Error	477	55.2	8.85
5	Retrival Error	329	36.2	5.10
6	Retrival Error	535	62.6	9.14
7	Retrival Error	351	38.8	6.47
8	Retrival Error	526	57.3	5.47
9	Retrival Error	576	61.8	10.74
10	Retrival Error	225	26.3	9.72
11	Retrival Error	629	71.9	6.38
12	Retrival Error	400	44.0	6.54
13	Retrival Error	347	35.8	9.22
14	Retrival Error	399	44.6	5.34
15	Retrival Error	810	91.7	4.75
16	Retrival Error	411	46.2	7.96
17	Retrival Error	1277	132.4	8.27
18	Retrival Error	96	10.5	4.61
19	Retrival Error	105	12.0	6.11
20	Retrival Error	493	52.8	5.44
21	Retrival Error	508	54.5	5.76
22	Retrival Error	251	28.4	6.52
23	Retrival Error	138	15.2	5.20
24	Retrival Error	56	5.2	10.93
25	Retrival Error	1683	179.9	6.20
26	Retrival Error	265	30.1	8.24
27	Retrival Error	1185	134.6	5.96
28	Retrival Error	97	11.4	7.97
29	Retrival Error	118	12.6	8.88
30	Retrival Error	120	12.8	5.06
31	Retrival Error	120	13.0	7.11
32	Retrival Error	1101	120.7	7.33
33	Retrival Error	251	27.6	9.47
34	Retrival Error	105	12.2	11.50
35	Retrival Error	517	57.6	9.04
36	Retrival Error	1275	148.9	9.69
37	Retrival Error	347	38.8	7.02
38	Retrival Error	131	13.7	7.80
39	Retrival Error	130	14.9	4.53
40	Retrival Error	430	47.0	6.55
41	Retrival Error	53	6.2	8.85
42	Retrival Error	268	30.9	6.54
43	Retrival Error	561	57.2	5.07
44	Retrival Error	159	18.3	10.13
45	Retrival Error	172	19.9	5.24
46	Retrival Error	104	11.1	8.50
47	Retrival Error	338	40.0	9.45
48	Retrival Error	129	14.5	9.29
49	Retrival Error	285	31.1	6.09
50	Retrival Error	471	51.1	8.50
51	Retrival Error	36	4.1	9.31
52	Retrival Error	508	55.0	5.49
53	Retrival Error	834	93.4	5.94
54	Retrival Error	283	32.6	6.33
55	Retrival Error	353	38.4	9.98
56	Retrival Error	382	42.6	9.13
57	Retrival Error	89	9.7	4.78
58	Retrival Error	410	45.8	8.44
59	Retrival Error	614	72.1	9.22
60	Retrival Error	98	11.1	8.10

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Retrival Error	92	10.3	7.17
Retrival Error	2407	268.8	6.98
Retrival Error	2151	235.0	6.60
Retrival Error	922	105.3	6.20
Retrival Error	826	91.7	7.94
Retrival Error	218	24.9	9.92
Retrival Error	231	26.1	6.83
Retrival Error	240	26.9	6.04
Retrival Error	537	58.8	8.73
Retrival Error	1583	184.5	5.11
Retrival Error	1081	115.3	7.78
Retrival Error	57	6.6	5.19
Retrival Error	106	11.6	9.41
Retrival Error	357	39.2	5.63
Retrival Error	204	23.5	6.43
Retrival Error	79	8.5	7.17
Retrival Error	299	34.7	11.43
Retrival Error	174	19.7	7.49
Retrival Error	32	3.6	4.17
Retrival Error	2701	307.9	6.46
Retrival Error	372	42.1	5.10
Retrival Error	633	72.6	8.07
Retrival Error	108	11.9	8.00
Retrival Error	482	51.8	8.62
Retrival Error	527	56.4	6.15
Retrival Error	96	10.4	7.28
Retrival Error	475	52.1	6.15
Retrival Error	2341	266.9	6.33
Retrival Error	435	51.2	6.42
Retrival Error	827	92.1	5.55
Retrival Error	225	26.1	6.54
Retrival Error	802	87.7	6.96
Retrival Error	799	89.2	8.72
Retrival Error	772	86.6	5.06
Retrival Error	394	46.2	6.18
Retrival Error	461	52.1	9.73
Retrival Error	87	10.2	5.15
Retrival Error	106	10.9	7.90
Retrival Error	1075	121.3	6.24
Retrival Error	209	24.5	9.14
Retrival Error	121	13.3	5.99
Retrival Error	96	10.1	8.32
Retrival Error	99	10.5	9.03
Retrival Error	100	10.9	8.66
Retrival Error	99	10.7	5.31
Retrival Error	101	11.0	7.83
Retrival Error	101	11.0	7.84
Retrival Error	100	10.8	5.01
Retrival Error	101	10.9	7.84
Retrival Error	100	10.7	5.33
Retrival Error	210	23.4	4.94
Retrival Error	745	82.9	8.95
Retrival Error	125	13.8	4.88
Retrival Error	113	12.5	5.96
Retrival Error	1506	167.6	7.83
Retrival Error	100	11.0	9.45
Retrival Error	197	21.4	9.66
Retrival Error	72	7.2	7.18
Retrival Error	458	49.4	6.11

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2	Retrival Error	493	48.6	9.69
3	Retrival Error	100	10.7	10.27
4	Retrival Error	108	11.3	5.19
5	Retrival Error	55	6.5	4.65
6	Retrival Error	86	8.9	4.07
7	Retrival Error	72	8.4	10.15
8	Retrival Error	60	6.7	6.95
9	Retrival Error	64	7.5	7.42
10	Retrival Error	125	14.3	5.99
11	Retrival Error	93	10.8	9.00
12	Retrival Error	67	7.5	11.93
13	Retrival Error	86	9.8	8.81
14	Retrival Error	101	11.1	11.09
15	Retrival Error	101	11.0	7.46
16	Retrival Error	97	10.6	8.34
17	Retrival Error	154	18.2	4.64
18	Retrival Error	126	13.1	9.54
19	Retrival Error	54	6.2	9.19
20	Retrival Error	90	9.9	9.48
21	Retrival Error	99	10.5	9.33
22	Retrival Error	120	13.0	6.16
23	Retrival Error	101	12.0	10.20
24	Retrival Error	102	11.6	9.13
25	Retrival Error	109	12.7	4.27
26	Retrival Error	105	12.2	7.77
27	Retrival Error	90	10.0	8.63
28	Retrival Error	87	9.6	4.93
29	Retrival Error	80	9.1	6.51
30	Retrival Error	51	5.6	8.03
31	Retrival Error	64	7.3	4.20
32	Retrival Error	107	12.9	5.63
33	Retrival Error	141	15.4	10.55
34	Retrival Error	93	10.2	5.76
35	Retrival Error	84	9.3	5.19
36	Retrival Error	93	10.3	8.15
37	Retrival Error	125	14.6	4.92
38	Retrival Error	107	11.7	7.05
39	Retrival Error	143	15.4	8.27
40	Retrival Error	54	5.7	11.60
41	Retrival Error	98	11.2	10.70
42	Retrival Error	145	15.8	7.37
43	Retrival Error	120	13.5	5.34
44	Retrival Error	69	8.0	8.40
45	Retrival Error	53	6.2	11.80
46	Retrival Error	77	8.7	7.12
47	Retrival Error	101	11.4	10.70
48	Retrival Error	93	10.6	10.33
49	Retrival Error	132	14.8	8.91
50	Retrival Error	58	6.5	10.87
51	Retrival Error	78	8.5	10.68
52	Retrival Error	849	93.6	5.68
53	Retrival Error	934	108.2	5.74
54	Retrival Error	439	47.4	10.01
55	Retrival Error	110	11.4	7.11
56	Retrival Error	1161	126.7	5.77
57	Retrival Error	123	13.7	5.01
58	Retrival Error	263	28.0	5.35
59	Retrival Error	269	28.1	8.21
60	Retrival Error	124	13.4	6.61



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	Retrival Error	2046	229.5	6.29
	Retrival Error	114	12.1	5.01
	Retrival Error	45	5.1	11.39
	Retrival Error	55	6.0	8.97
	Retrival Error	814	89.1	7.78
	Retrival Error	179	20.2	8.91
	Retrival Error	87	9.7	9.03
	Retrival Error	84	9.7	8.75
	Retrival Error	85	9.8	8.84
	Retrival Error	298	33.5	8.13
	Retrival Error	146	15.7	8.47
	Retrival Error	139	16.3	9.31
	Retrival Error	945	99.1	5.55
	Retrival Error	261	29.6	8.69
	Retrival Error	949	105.1	7.40
	Retrival Error	1004	115.2	7.61
	Retrival Error	538	60.4	7.59
	Retrival Error	440	47.0	11.00
	Retrival Error	686	73.3	9.03
	Retrival Error	104	11.9	9.09
	Retrival Error	233	27.6	11.09
	Retrival Error	60	6.4	8.21
	Retrival Error	528	60.5	8.91
	Retrival Error	332	35.0	9.73
	Retrival Error	372	40.1	4.32
	Retrival Error	288	33.5	8.25
	Retrival Error	241	26.7	7.80
	Retrival Error	410	46.4	6.68
	Retrival Error	751	83.7	5.78
	Retrival Error	854	94.4	6.93
	Retrival Error	364	39.7	10.95
	Retrival Error	518	61.4	8.91
	Retrival Error	175	19.4	9.22
	Retrival Error	646	75.1	5.53
	Retrival Error	351	38.7	5.41
	Retrival Error	470	51.3	9.19
	Retrival Error	3288	356.7	7.37
	Retrival Error	1211	135.4	6.07
	Retrival Error	2188	247.7	5.91
	Retrival Error	648	74.4	5.22
	Retrival Error	1443	161.8	6.32
	Retrival Error	673	74.0	5.68
	Retrival Error	274	29.7	8.19
	Retrival Error	415	44.5	9.80
	Retrival Error	916	105.7	6.48
	Retrival Error	168	19.8	8.43
	Retrival Error	208	23.3	7.66
	Retrival Error	1085	122.2	7.20
	Retrival Error	456	51.3	8.18
	Retrival Error	573	64.4	6.98
	Retrival Error	397	45.0	7.66
	Retrival Error	381	43.6	7.65
	Retrival Error	759	87.2	8.82
	Retrival Error	536	59.6	8.78
	Retrival Error	460	50.6	7.02
	Retrival Error	681	75.3	5.90
	Retrival Error	631	69.9	5.55
	Retrival Error	377	43.0	5.77
	Retrival Error	680	75.5	7.36

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2	Retrival Error	488	56.2	8.25
3	Retrival Error	3136	348.8	6.16
4	Retrival Error	1311	153.6	5.39
5	Retrival Error	318	36.7	8.60
6	Retrival Error	1487	166.5	7.20
7	Retrival Error	357	38.5	8.16
8	Retrival Error	603	66.0	5.82
9	Retrival Error	117	12.7	8.73
10	Retrival Error	123	12.9	5.36
11	Retrival Error	120	13.0	4.88
12	Retrival Error	120	13.2	5.14
13	Retrival Error	121	13.2	7.97
14	Retrival Error	120	13.4	9.76
15	Retrival Error	117	12.9	8.44
16	Retrival Error	121	13.2	5.99
17	Retrival Error	123	13.6	7.28
18	Retrival Error	123	13.5	7.37
19	Retrival Error	118	12.9	6.28
20	Retrival Error	126	13.6	5.11
21	Retrival Error	117	12.7	7.28
22	Retrival Error	183	21.7	5.78
23	Retrival Error	94	10.5	9.48
24	Retrival Error	101	11.9	4.56
25	Retrival Error	584	65.2	7.52
26	Retrival Error	255	28.9	6.52
27	Retrival Error	337	39.2	8.66
28	Retrival Error	221	26.0	6.11
29	Retrival Error	227	24.0	8.53
30	Retrival Error	77	8.7	8.48
31	Retrival Error	441	47.4	7.74
32	Retrival Error	89	9.8	8.21
33	Retrival Error	238	26.9	7.88
34	Retrival Error	345	39.2	6.14
35	Retrival Error	90	10.1	6.96
36	Retrival Error	149	16.6	11.00
37	Retrival Error	39	4.5	10.39
38	Retrival Error	227	24.3	8.72
39	Retrival Error	81	9.2	7.50
40	Retrival Error	349	39.5	8.76
41	Retrival Error	232	25.9	6.40
42	Retrival Error	100	10.1	8.98
43	Retrival Error	139	15.4	9.19
44	Retrival Error	110	12.8	5.95
45	Retrival Error	76	8.9	9.69
46	Retrival Error	145	16.1	4.79
47	Retrival Error	354	40.7	7.97
48	Retrival Error	124	13.7	5.17
49	Retrival Error	3038	337.5	6.28
50	Retrival Error	63	6.9	4.42
51	Retrival Error	20	2.2	6.16
52	Retrival Error	233	24.5	11.55
53	Retrival Error	412	45.2	7.33
54	Retrival Error	121	12.9	8.66
55	Retrival Error	145	16.8	9.72
56	Retrival Error	26	2.9	8.73
57	Retrival Error	1063	119.0	7.49
58	Retrival Error	1447	157.5	6.46
59	Retrival Error	133	14.3	8.94
60	Retrival Error	344	38.1	8.75

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	Retrival Error	153	16.5	9.63
	Retrival Error	121	14.3	4.88
	Retrival Error	644	66.0	7.80
	Retrival Error	863	97.5	7.39
	Retrival Error	121	13.2	9.22
	Retrival Error	121	13.4	8.48
	Retrival Error	126	13.8	7.05
	Retrival Error	74	8.3	7.18
	Retrival Error	104	11.3	8.88
	Retrival Error	543	61.2	5.83
	Retrival Error	89	9.7	8.84
	Retrival Error	337	38.1	6.14
	Retrival Error	181	21.0	6.93
	Retrival Error	111	12.4	9.33
	Retrival Error	136	14.8	9.55
	Retrival Error	140	15.3	9.74
	Retrival Error	273	31.7	5.82
	Retrival Error	89	10.8	7.88
	Retrival Error	162	18.1	5.82
	Retrival Error	52	6.2	7.18
	Retrival Error	115	12.5	7.28
	Retrival Error	123	13.5	5.45
	Retrival Error	123	13.6	7.97
	Retrival Error	81	9.2	9.17
	Retrival Error	129	13.7	8.47
	Retrival Error	123	13.4	8.43
	Retrival Error	121	13.1	5.99
	Retrival Error	128	14.1	9.17
	Retrival Error	126	13.7	8.00
	Retrival Error	124	13.3	7.96
	Retrival Error	130	14.2	9.17
	Retrival Error	129	14.1	9.07
	Retrival Error	118	13.3	9.64
	Retrival Error	125	14.2	8.69
	Retrival Error	119	13.3	7.83
	Retrival Error	578	64.1	5.14
	Retrival Error	263	30.5	5.19
	Retrival Error	104	11.8	8.21
	Retrival Error	298	33.4	5.19
	Retrival Error	272	30.7	5.12
	Retrival Error	1338	152.9	6.67
	Retrival Error	590	62.1	6.79
	Retrival Error	158	18.3	9.17
	Retrival Error	313	35.6	8.48
	Retrival Error	162	18.3	7.05
	Retrival Error	430	47.1	9.03
	Retrival Error	55	5.8	12.00
	Retrival Error	284	32.4	4.83
	Retrival Error	1294	144.4	6.52
	Retrival Error	1357	153.3	6.57
	Retrival Error	559	60.3	8.75
	Retrival Error	2246	243.6	6.51
	Retrival Error	3022	340.9	6.40
	Retrival Error	1226	135.9	8.56
	Retrival Error	913	100.9	8.16
	Retrival Error	144	16.2	7.05
	Retrival Error	144	15.7	5.24
	Retrival Error	108	11.2	7.96
	Retrival Error	321	35.9	5.63

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2	Retrival Error	167	19.1	7.77
3	Retrival Error	509	53.6	7.01
4	Retrival Error	288	30.4	10.96
5	Retrival Error	350	39.7	8.94
6	Retrival Error	209	22.5	6.54
7	Retrival Error	517	56.3	6.99
8	Retrival Error	250	28.3	9.03
9	Retrival Error	321	37.0	8.87
10	Retrival Error	540	61.8	9.58
11	Retrival Error	639	69.4	8.95
12	Retrival Error	386	43.5	9.29
13	Retrival Error	603	69.4	8.07
14	Retrival Error	276	29.9	6.05
15	Retrival Error	281	30.4	7.69
16	Retrival Error	330	37.3	8.31
17	Retrival Error	692	76.4	6.20
18	Retrival Error	407	44.5	7.25
19	Retrival Error	1638	176.1	8.50
20	Retrival Error	2564	286.8	6.83
21	Retrival Error	486	56.1	9.04
22	Retrival Error	1712	199.1	8.05
23	Retrival Error	446	51.3	5.62
24	Retrival Error	747	80.9	9.35
25	Retrival Error	411	46.5	6.32
26	Retrival Error	632	72.0	6.32
27	Retrival Error	1997	233.4	6.52
28	Retrival Error	137	15.6	7.25
29	Retrival Error	370	42.7	8.66
30	Retrival Error	580	65.3	5.17
31	Retrival Error	866	96.6	4.61
32	Retrival Error	1866	209.9	7.11
33	Retrival Error	351	38.5	9.89
34	Retrival Error	378	41.1	6.87
35	Retrival Error	496	55.6	6.11
36	Retrival Error	878	100.9	7.56
37	Retrival Error	8721	1002.8	5.52
38	Retrival Error	2434	273.7	6.28
39	Retrival Error	526	58.3	9.11
40	Retrival Error	205	22.1	4.79
41	Retrival Error	307	35.3	8.95
42	Retrival Error	537	61.4	8.73
43	Retrival Error	2792	316.0	6.95
44	Retrival Error	1227	139.3	6.16
45	Retrival Error	502	58.1	7.69
46	Retrival Error	877	99.4	6.35
47	Retrival Error	889	100.7	7.68
48	Retrival Error	865	91.4	8.72
49	Retrival Error	455	52.0	8.81
50	Retrival Error	703	77.2	6.06
51	Retrival Error	1414	157.7	5.36
52	Retrival Error	1865	208.3	8.76
53	Retrival Error	1165	132.4	7.36
54	Retrival Error	2735	307.0	6.15
55	Retrival Error	357	38.8	8.24
56	Retrival Error	241	27.5	5.35
57	Retrival Error	1553	174.6	7.11
58	Retrival Error	465	50.6	9.26
59	Retrival Error	7553	856.3	5.36
60	Retrival Error	5177	573.4	6.05

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Retrival Error	569	63.1	9.76
Retrival Error	1694	181.0	9.01
Retrival Error	413	45.0	11.47
Retrival Error	858	96.2	4.67
Retrival Error	3126	362.2	4.89
Retrival Error	91	10.2	5.76
Retrival Error	126	13.7	7.96
Retrival Error	750	83.4	6.79
Retrival Error	219	24.7	9.23
Retrival Error	111	11.5	4.28
Retrival Error	124	14.5	9.61
Retrival Error	826	92.0	6.30
Retrival Error	393	43.0	9.80
Retrival Error	2392	269.3	6.19
Retrival Error	621	69.7	9.80
Retrival Error	558	62.2	4.87
Retrival Error	2971	315.4	5.66
Retrival Error	518	56.9	6.28
Retrival Error	80	8.6	5.24
Retrival Error	230	25.7	8.16
Retrival Error	103	11.4	9.60
Retrival Error	126	13.5	9.35
Retrival Error	115	12.9	8.84
Retrival Error	114	12.6	7.97
Retrival Error	120	13.2	5.45
Retrival Error	112	12.4	8.85
Retrival Error	111	12.3	8.48
Retrival Error	114	12.6	8.91
Retrival Error	84	9.5	9.04
Retrival Error	72	8.2	6.55
Retrival Error	679	75.5	7.01
Retrival Error	97	10.5	8.53
Retrival Error	667	73.5	8.09
Retrival Error	266	30.0	7.47
Retrival Error	165	17.6	5.03
Retrival Error	145	16.1	8.56
Retrival Error	67	7.3	8.18
Retrival Error	133	14.1	5.14
Retrival Error	82	8.8	7.97
Retrival Error	218	25.4	8.97
Retrival Error	211	24.1	6.52
Retrival Error	116	12.8	9.13
Retrival Error	162	18.8	9.77
Retrival Error	138	15.1	9.70
Retrival Error	92	10.3	6.61
Retrival Error	86	9.6	9.00
Retrival Error	705	78.5	8.21
Retrival Error	497	58.0	6.96
Retrival Error	386	43.3	8.75
Retrival Error	157	17.2	7.12
Retrival Error	356	39.4	5.50
Retrival Error	1159	130.0	8.32
Retrival Error	450	47.4	6.05
Retrival Error	186	21.4	8.38
Retrival Error	590	68.2	9.39
Retrival Error	351	39.5	5.31
Retrival Error	344	38.4	5.19
Retrival Error	512	56.6	7.91
Retrival Error	886	101.2	9.57

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2	Retrival Error	720	81.9	7.47
3	Retrival Error	108	11.9	7.47
4	Retrival Error	362	40.6	6.25
5	Retrival Error	68	7.6	9.19
6	Retrival Error	108	11.9	5.06
7	Retrival Error	111	11.5	6.44
8	Retrival Error	188	20.9	6.19
9	Retrival Error	362	41.8	4.89
10	Retrival Error	442	49.0	8.40
11	Retrival Error	80	9.0	5.15
12	Retrival Error	723	77.7	9.45
13	Retrival Error	355	40.7	6.38
14	Retrival Error	470	50.6	6.55
15	Retrival Error	449	50.8	6.15
16	Retrival Error	344	39.1	5.53
17	Retrival Error	161	17.4	8.95
18	Retrival Error	2228	244.3	8.78
19	Retrival Error	895	96.6	9.52
20	Retrival Error	89	10.7	6.16
21	Retrival Error	38	4.3	12.31
22	Retrival Error	135	16.1	6.52
23	Retrival Error	99	10.9	7.99
24	Retrival Error	554	62.7	8.75
25	Retrival Error	270	27.7	5.34
26	Retrival Error	362	42.6	9.16
27	Retrival Error	170	19.1	8.75
28	Retrival Error	102	10.8	8.38
29	Retrival Error	196	21.3	4.75
30	Retrival Error	716	82.6	7.52
31	Retrival Error	246	27.0	5.54
32	Retrival Error	699	79.6	9.29
33	Retrival Error	120	13.2	6.29
34	Retrival Error	326	36.5	5.06
35	Retrival Error	20	2.3	7.25
36	Retrival Error	1286	146.4	6.92
37	Retrival Error	246	27.3	6.52
38	Retrival Error	140	15.6	8.10
39	Retrival Error	644	73.3	5.77
40	Retrival Error	111	12.5	11.40
41	Retrival Error	389	43.6	6.57
42	Retrival Error	103	11.2	8.75
43	Retrival Error	663	74.0	5.08
44	Retrival Error	201	23.4	4.98
45	Retrival Error	551	65.0	5.96
46	Retrival Error	425	47.9	8.88
47	Retrival Error	122	14.2	9.69
48	Retrival Error	363	41.5	9.04
49	Retrival Error	782	85.3	8.79
50	Retrival Error	1078	120.0	9.67
51	Retrival Error	415	46.7	6.48
52	Retrival Error	83	9.7	9.25
53	Retrival Error	129	14.4	9.01
54	Retrival Error	313	35.0	8.50
55	Retrival Error	180	19.5	11.34
56	Retrival Error	151	17.2	8.87
57	Retrival Error	157	17.9	9.45
58	Retrival Error	446	49.8	8.85
59	Retrival Error	440	50.2	8.32
60	Retrival Error	308	34.1	10.77

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	Retrival Error	451	51.0	5.80
	Retrival Error	980	111.4	6.84
	Retrival Error	92	10.1	9.44
	Retrival Error	847	92.3	9.19
	Retrival Error	109	11.5	8.66
	Retrival Error	91	10.4	8.15
	Retrival Error	121	12.9	7.12
	Retrival Error	138	14.7	8.46
	Retrival Error	116	13.0	7.96
	Retrival Error	208	22.4	7.21
	Retrival Error	128	14.0	8.51
	Retrival Error	115	12.7	8.97
	Retrival Error	725	82.6	9.83
	Retrival Error	574	65.1	4.72
	Retrival Error	123	13.6	9.17

For Peer Review

Accession	Description
6166599	RecName: Full=Myosin-9; AltName: Full=Cellular myosin heavy chain, type A; AltName: Full=Myosin heavy chain 9; Alt
181402	epidermal cytokeratin 2 [Homo sapiens]
41322916	plectin isoform 1 [Homo sapiens]
123648	RecName: Full=Heat shock cognate 71 kDa protein; AltName: Full=Heat shock 70 kDa protein 8; AltName: Full=Lipopo
239938886	RecName: Full=Keratin, type I cytoskeletal 9; AltName: Full=Cytokeratin-9; Short=CK-9; AltName: Full=Keratin-9; Shor
74735628	RecName: Full=Sequestosome-1; AltName: Full=EBI3-associated protein of 60 kDa; Short=EBIAP; Short=p60; AltName
63087903	unnamed protein product [Homo sapiens]
194388850	unnamed protein product [Homo sapiens]
113950	RecName: Full=Annexin A2; AltName: Full=Annexin II; AltName: Full=Annexin-2; AltName: Full=Calpactin I heavy chai
119631419	titin, isoform CRA_a [Homo sapiens]
225733965	Chain L, Human Thrombopoietin Neutralizing Antibody Tn1 Fab
119581085	keratin 10 (epidermolytic hyperkeratosis; keratosis palmaris et plantaris), isoform CRA_b [Homo sapiens]
189306	nucleolin [Homo sapiens]
425518	anti-colorectal carcinoma heavy chain [Homo sapiens]
578837003	PREDICTED: histone acetyltransferase p300 isoform X1 [Homo sapiens]
146345444	RecName: Full=Kelch-like ECH-associated protein 1; AltName: Full=Cytosolic inhibitor of Nrf2; Short=INrf2; AltName: F
119614804	clathrin, heavy polypeptide (Hc), isoform CRA_d [Homo sapiens]
169404698	Chain D, Pyruvate Kinase M2 Is A Phosphotyrosine Binding Protein
189502784	mitochondrial heat shock 60kD protein 1 variant 1 [Homo sapiens]
221042022	unnamed protein product [Homo sapiens]
119608213	spectrin, alpha, non-erythrocytic 1 (alpha-fodrin), isoform CRA_c [Homo sapiens]
1195531	type I keratin 16 [Homo sapiens]
2769254	NIPSNAP2 protein [Homo sapiens]
378404908	glyceraldehyde-3-phosphate dehydrogenase isoform 2 [Homo sapiens]
119578453	alpha tubulin, isoform CRA_b [Homo sapiens]
194382178	unnamed protein product [Homo sapiens]
23491735	ribosomal protein L10a [Homo sapiens]
239938658	RecName: Full=Protein kinase C iota type; AltName: Full=Atypical protein kinase C-lambda/iota; Short=PRKC-lambda/ic
15341992	Unknown (protein for IMAGE:4347401), partial [Homo sapiens]
516764	motor protein [Homo sapiens]
190192192	filamin B [Homo sapiens]
568786378	Chain A, Structure Of The Mammalian Ribosomal Pre-termination Complex Associated With Erf1-erf3-gdnpn
485601393	Chain S, Structure Of The Human 40s Ribosomal Proteins
190192184	filamin A [Homo sapiens]
221045062	unnamed protein product [Homo sapiens]
300669711	RecName: Full=Fibrous sheath-interacting protein 2
119602167	dynein, cytoplasmic 1, heavy chain 1, isoform CRA_c [Homo sapiens]
119598181	ribosomal protein L4, isoform CRA_a [Homo sapiens]
14042692	unnamed protein product [Homo sapiens]
337580	ribosomal protein L3, partial [Homo sapiens]
39644662	HSP90AB1 protein [Homo sapiens]
34392	unnamed protein product [Homo sapiens]
119582734	RAD50 homolog (S. cerevisiae), isoform CRA_c [Homo sapiens]
31108	human elongation factor 2 [Homo sapiens]
194379998	unnamed protein product [Homo sapiens]
1827593	Chain B, Recombinant Cyclophilin A From Human T Cell
119577296	ribosomal protein S16, isoform CRA_a [Homo sapiens]
119612227	poly(A) binding protein, cytoplasmic 1, isoform CRA_c [Homo sapiens]
119601423	hCG2028724 [Homo sapiens]
119594430	eukaryotic translation elongation factor 1 gamma, isoform CRA_b [Homo sapiens]
119582155	hCG1783090 [Homo sapiens]
340219	vimentin [Homo sapiens]
56675570	unnamed protein product [Homo sapiens]
825671	B23 nucleophosmin (280 AA) [Homo sapiens]



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32488	unnamed protein product [Homo sapiens]
530420475	PREDICTED: protein NipSnap homolog 1 isoform X1 [Homo sapiens]
40031212	unnamed protein product [Homo sapiens]
403234036	eukaryotic translation initiation factor 3 [Homo sapiens]
31873360	hypothetical protein [Homo sapiens]
160332335	RecName: Full=Neuroblast differentiation-associated protein AHNAK; AltName: Full=Desmoyokin
58530842	desmoplakin isoform II [Homo sapiens]
485601397	Chain R, Structure Of The Human 40s Ribosomal Proteins
119615022	leucine rich repeat containing 59, isoform CRA_a [Homo sapiens]
49257460	PTRF protein [Homo sapiens]
21620099	Treacher Collins-Franceschetti syndrome 1 [Homo sapiens]
48735185	EEF1A1 protein [Homo sapiens]
375151597	60S ribosomal protein L10 isoform c [Homo sapiens]
15431310	keratin, type I cytoskeletal 14 [Homo sapiens]
157829895	Chain A, Crystal Structure Of Human Annexin I At 2.5 Angstroms Resolution
119621461	ribosomal protein S7, isoform CRA_a [Homo sapiens]
119631904	nebulin, isoform CRA_a [Homo sapiens]
119626065	albumin, isoform CRA_b [Homo sapiens]
119602460	ribosomal protein L8, isoform CRA_f [Homo sapiens]
119569562	antigen identified by monoclonal antibody Ki-67, isoform CRA_a [Homo sapiens]
119569329	hCG1640785, isoform CRA_a [Homo sapiens]
221045918	unnamed protein product [Homo sapiens]
10435150	unnamed protein product [Homo sapiens]
63102283	CKAP4 protein [Homo sapiens]
62204505	RPL13 protein [Homo sapiens]
38014351	EEF1D protein, partial [Homo sapiens]
34785048	RPS6 protein, partial [Homo sapiens]
40040444	unnamed protein product [Homo sapiens]
530392193	PREDICTED: 6-phosphofructokinase type C isoform X3 [Homo sapiens]
55507560	unknown [Homo sapiens]
50513340	Chain A, Nmr Structure Of Human Cofilin
12643540	RecName: Full=Proteasome subunit alpha type-7; AltName: Full=Proteasome subunit RC6-1; AltName: Full=Proteasom
485601396	Chain L, Structure Of The Human 40s Ribosomal Proteins
485601390	Chain O, Structure Of The Human 40s Ribosomal Proteins
122937211	proteasome-associated protein ECM29 homolog [Homo sapiens]
33341236	polytrophin [Homo sapiens]
118498368	kinectin isoform c [Homo sapiens]
296439473	RecName: Full=Dynein heavy chain 10, axonemal; AltName: Full=Axonemal beta dynein heavy chain 10; AltName: Full
75517570	HNRPA1 protein [Homo sapiens]
119574650	hect domain and RLD 4, isoform CRA_e [Homo sapiens]
194386084	unnamed protein product [Homo sapiens]
259016354	RecName: Full=Protein ELYS; AltName: Full=Embryonic large molecule derived from yolk sac; AltName: Full=Protein M
119590009	cytoplasmic linker 2, isoform CRA_a [Homo sapiens]
374532823	Golgin subfamily B member 1 isoform 4 [Homo sapiens]
4930167	Chain A, Human Muscle Aldolase
166007177	Chain T, Solution Structure Of Human Immunoglobulin M
225733966	Chain H, Human Thrombopoietin Neutralizing Antibody Tn1 Fab
1587352	globin 245
2661039	alpha enolase [Homo sapiens]
119619469	dystrophin (muscular dystrophy, Duchenne and Becker types), isoform CRA_c [Homo sapiens]
119615215	karyopherin (importin) beta 1, isoform CRA_b [Homo sapiens]
119612228	hCG15685 [Homo sapiens]
119607089	protein kinase, DNA-activated, catalytic polypeptide, isoform CRA_d [Homo sapiens]
119600702	hCG1989166, isoform CRA_c, partial [Homo sapiens]
119590272	obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF, isoform CRA_a [Homo sapiens]

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2	119582699 heat shock 70kDa protein 4, isoform CRA_b [Homo sapiens]
3	119576069 myosin XVA, isoform CRA_c [Homo sapiens]
4	21754583 unnamed protein product [Homo sapiens]
5	39645240 HNRPU protein, partial [Homo sapiens]
6	38114878 RPL13A protein, partial [Homo sapiens]
7	21619981 LMNA protein [Homo sapiens]
8	116283708 DHX9 protein [Homo sapiens]
9	40040430 unnamed protein product [Homo sapiens]
10	20521005 KIAA0342 protein [Homo sapiens]
11	161172139 Chain B, Phosphorylation Independent Interactions Between 14-3-3 And Exoenzyme S: From Structure To Pathogenesis
12	298508322 Chain F, Structure Of P97 N-D1 R95g Mutant In Complex With Atpgs
13	13097600 Similar to ribosomal protein L23, partial [Homo sapiens]
14	645912958 major vault protein isoform 2 [Homo sapiens]
15	578801447 PREDICTED: tropomyosin alpha-3 chain isoform X6 [Homo sapiens]
16	89574029 mitochondrial ATP synthase, H+ transporting F1 complex beta subunit [Homo sapiens]
17	29334005 unnamed protein product [Homo sapiens]
18	119581825 ribosomal protein L26-like 1, isoform CRA_a [Homo sapiens]
19	153792663 myosin-2 [Homo sapiens]
20	2506816 RecName: Full=Versican core protein; AltName: Full=Chondroitin sulfate proteoglycan core protein 2; Short=Chondroitin
21	485601388 Chain U, Structure Of The Human 40s Ribosomal Proteins
22	4503513 eukaryotic translation initiation factor 3 subunit I [Homo sapiens]
23	118572681 RecName: Full=Phosphatidylinositol 3-kinase regulatory subunit alpha; Short=PI3-kinase regulatory subunit alpha; Sho
24	4501889 actin, gamma-enteric smooth muscle isoform 1 precursor [Homo sapiens]
25	119627197 zinc finger, FYVE domain containing 9, isoform CRA_c [Homo sapiens]
26	14589854 protein tyrosine phosphatase type IVA 3 isoform 2 [Homo sapiens]
27	119613293 hCG2027030, partial [Homo sapiens]
28	21758964 unnamed protein product [Homo sapiens]
29	485601399 Chain T, Structure Of The Human 40s Ribosomal Proteins
30	308153582 RecName: Full=Neuron navigator 2; AltName: Full=Helicase APC down-regulated 1; AltName: Full=Pore membrane anc
31	121925 RecName: Full=Histone H1.3; AltName: Full=Histone H1c; AltName: Full=Histone H1s-2
32	238054406 RecName: Full=Keratin, type II cytoskeletal 1; AltName: Full=67 kDa cytokeratin; AltName: Full=Cytokeratin-1; Short=
33	485601395 Chain N, Structure Of The Human 40s Ribosomal Proteins
34	296439461 RecName: Full=Protein broad-minded; AltName: Full=TBC1 domain family member 32
35	118572619 RecName: Full=Adenylate cyclase type 5; AltName: Full=ATP pyrophosphate-lyase 5; AltName: Full=Adenylate cyclase
36	119598471 optic atrophy 1 (autosomal dominant), isoform CRA_b [Homo sapiens]
37	21928473 seven transmembrane helix receptor [Homo sapiens]
38	126362947 sodium channel protein type 3 subunit alpha isoform 2 [Homo sapiens]
39	578835066 PREDICTED: liprin-alpha-3 isoform X1 [Homo sapiens]
40	74756116 RecName: Full=Zinc finger and BTB domain-containing protein 41
41	47076897 unnamed protein product [Homo sapiens]
42	119577859 hypothetical protein FLJ20512 [Homo sapiens]
43	58761484 T-complex protein 1 subunit gamma isoform c [Homo sapiens]
44	193786214 unnamed protein product [Homo sapiens]
45	18375644 tyrosine-protein phosphatase non-receptor type 11 isoform 2 [Homo sapiens]
46	182627587 RecName: Full=Putative ankyrin repeat domain-containing protein 31
47	119614677 proteasome (prosome, macropain) 26S subunit, ATPase, 5, isoform CRA_b [Homo sapiens]
48	27436873 E3 ubiquitin-protein ligase SHPRH isoform b [Homo sapiens]
49	24660442 MYO18A protein [Homo sapiens]
50	172044680 RecName: Full=Dynein heavy chain 2, axonemal; AltName: Full=Axonemal beta dynein heavy chain 2; AltName: Full=C
51	119599446 coatomer protein complex, subunit beta 2 (beta prime), isoform CRA_b [Homo sapiens]
52	119608075 ribosomal protein L12, isoform CRA_d [Homo sapiens]
53	205371795 RecName: Full=BAH and coiled-coil domain-containing protein 1; AltName: Full=Bromo adjacent homology domain-con
54	530377992 PREDICTED: storkhead-box protein 2 isoform X1 [Homo sapiens]
55	119592618 ribosomal protein S9, isoform CRA_c [Homo sapiens]
56	119598167 hypothetical protein MGC4562, isoform CRA_d [Homo sapiens]
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2	172046085	RecName: Full=Dynein heavy chain 14, axonemal; AltName: Full=Axonemal beta dynein heavy chain 14; AltName: Full
3	194384416	unnamed protein product [Homo sapiens]
4	554790420	NAD(P)H dehydrogenase [quinone] 1 isoform d [Homo sapiens]
5	194385216	unnamed protein product [Homo sapiens]
6	219518228	Unknown (protein for MGC:177866) [Homo sapiens]
7	260099727	L-lactate dehydrogenase A chain isoform 5 [Homo sapiens]
8	194379468	unnamed protein product [Homo sapiens]
9	194375492	unnamed protein product [Homo sapiens]
10	221044142	unnamed protein product [Homo sapiens]
11	10436376	unnamed protein product [Homo sapiens]
12	321117084	RPS10-NUDT3 protein [Homo sapiens]
13	119597906	testis expressed sequence 9 [Homo sapiens]
14	331284176	nuclear receptor corepressor 2 isoform 2 [Homo sapiens]
15	194378812	unnamed protein product [Homo sapiens]
16	256542310	dynein heavy chain 17, axonemal [Homo sapiens]
17	20150918	Chain A, Crystal Structure Of The N-Terminal Segment Of Human Eukaryotic Initiation Factor 2alpha
18	157883792	Chain A, Nmr Structure Of The Second Qrrm Domain Of Human Hnrnp F
19	315583650	Chain A, Crystal Structure Of Human Dnmt1(646-1600) In Complex With Dna
20	223673784	Chain A, Human Acylphosphatase(Acph) Surface Charge-Optimized
21	284232	Ig heavy chain V region - human
22	224053	macroglobulin alpha2
23	119613451	nuclear transcription factor, X-box binding-like 1, isoform CRA_e [Homo sapiens]
24	337451	hnRNP type A/B protein [Homo sapiens]
25	1136741	KIAA0002 [Homo sapiens]
26	551411917	DBF4-type zinc finger-containing protein 2 isoform 2 [Homo sapiens]
27	120538705	ATP2B3 protein [Homo sapiens]
28	109734611	Myosin, heavy chain 10, non-muscle [Homo sapiens]
29	10438219	unnamed protein product [Homo sapiens]
30	4388965	Chain L, Antibody To Campath-1h Humanized Fab
31	119629468	hCG2011852 [Homo sapiens]
32	119629071	KIAA0564 protein, isoform CRA_b [Homo sapiens]
33	119628802	ribosomal protein L21, isoform CRA_c [Homo sapiens]
34	119625048	KM-HN-1 protein, isoform CRA_a [Homo sapiens]
35	119623948	euchromatic histone-lysine N-methyltransferase 2, isoform CRA_d [Homo sapiens]
36	119623343	hCG1999854, isoform CRA_a [Homo sapiens]
37	119618140	hCG2015269, isoform CRA_c [Homo sapiens]
38	119617634	chaperonin containing TCP1, subunit 2 (beta), isoform CRA_a [Homo sapiens]
39	119616102	microtubule-associated protein 1B, isoform CRA_a [Homo sapiens]
40	119614240	heterogeneous nuclear ribonucleoprotein A2/B1, isoform CRA_a [Homo sapiens]
41	119613723	hCG1985901 [Homo sapiens]
42	119613335	ribosomal protein L9, isoform CRA_c [Homo sapiens]
43	119612929	spectrin, beta, non-erythrocytic 5 [Homo sapiens]
44	119612251	E3 ubiquitin protein ligase, HECT domain containing, 1, isoform CRA_c [Homo sapiens]
45	119611612	translocated promoter region (to activated MET oncogene), isoform CRA_d [Homo sapiens]
46	119611276	kinesin-associated protein 3, isoform CRA_b [Homo sapiens]
47	119610957	TSR1, 20S rRNA accumulation, homolog (yeast), isoform CRA_d [Homo sapiens]
48	119610275	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5, isoform CRA_b [Homo sapiens]
49	119609433	proteasome (prosome, macropain) 26S subunit, non-ATPase, 12, isoform CRA_b [Homo sapiens]
50	119609377	Jumonji, AT rich interactive domain 1A (RBBP2-like), isoform CRA_b [Homo sapiens]
51	119609186	nucleolar protein 1, 120kDa [Homo sapiens]
52	119604554	dynamin 2, isoform CRA_e [Homo sapiens]
53	119600676	neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease), isoform CRA_c [Homo sapiens]
54	119598667	eukaryotic translation initiation factor 4 gamma, 1, isoform CRA_e [Homo sapiens]
55	119598006	vacuolar protein sorting 13C (yeast), isoform CRA_b [Homo sapiens]
56	119597394	hCG19253, isoform CRA_d [Homo sapiens]
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2	119592222 ribosomal protein S4, X-linked, isoform CRA_b, partial [Homo sapiens]
3	119591307 thyroid hormone receptor interactor 12, isoform CRA_f [Homo sapiens]
4	119590595 hCG1653748 [Homo sapiens]
5	119590527 dynein, axonemal, heavy polypeptide 7, isoform CRA_b [Homo sapiens]
6	119579125 protein tyrosine phosphatase, receptor type, D, isoform CRA_d [Homo sapiens]
7	119576757 hCG39912, isoform CRA_b [Homo sapiens]
8	119574194 heterogeneous nuclear ribonucleoprotein H1 (H), isoform CRA_b [Homo sapiens]
9	119573054 Rho GTPase activating protein 30, isoform CRA_c [Homo sapiens]
10	119572456 diaphanous homolog 3 (Drosophila), isoform CRA_c [Homo sapiens]
11	119570361 tolloid-like 2, isoform CRA_b [Homo sapiens]
12	119569863 tudor domain containing 1, isoform CRA_c [Homo sapiens]
13	119569579 dedicator of cytokinesis 1 [Homo sapiens]
14	221046404 unnamed protein product [Homo sapiens]
15	33096800 hypothetical protein [Homo sapiens]
16	194388520 unnamed protein product [Homo sapiens]
17	194381188 unnamed protein product [Homo sapiens]
18	194374917 unnamed protein product [Homo sapiens]
19	194374597 unnamed protein product [Homo sapiens]
20	193788435 unnamed protein product [Homo sapiens]
21	193787899 unnamed protein product [Homo sapiens]
22	193785065 unnamed protein product [Homo sapiens]
23	158259305 unnamed protein product [Homo sapiens]
24	21756441 unnamed protein product [Homo sapiens]
25	7023915 unnamed protein product [Homo sapiens]
26	18676660 FLJ00229 protein [Homo sapiens]
27	47939143 YBX1 protein, partial [Homo sapiens]
28	28838367 LOXHD1 protein [Homo sapiens]
29	507898 glutamate transporter [Homo sapiens]
30	158253421 DNAH9 protein [Homo sapiens]
31	189053448 unnamed protein product [Homo sapiens]
32	47077415 unnamed protein product [Homo sapiens]
33	34533879 unnamed protein product [Homo sapiens]
34	34531561 unnamed protein product [Homo sapiens]
35	80476693 NBN protein [Homo sapiens]
36	12232589 TFNR [Homo sapiens]
37	40788890 KIAA0165 [Homo sapiens]
38	519882971 RecName: Full=Putative ciliary rootlet coiled-coil protein-like 3 protein
39	444738577 alternative protein IPO7 [Homo sapiens]
40	109730579 Collagen, type XXIV, alpha 1 [Homo sapiens]
41	56078799 Ribosomal protein S27a [Homo sapiens]
42	33440522 FBXO38 protein [Homo sapiens]
43	15928389 Unknown (protein for IMAGE:4158571), partial [Homo sapiens]
44	15680023 B-cell receptor-associated protein 31 [Homo sapiens]
45	13938339 ATP5A1 protein, partial [Homo sapiens]
46	847816 interferon omega-1, partial [Homo sapiens]
47	1147783 myosin-IXb [Homo sapiens]
48	1049053 encodes region of fatty acid synthase activity; FAS; multifunctional protein [Homo sapiens]
49	183272 glutamate decarboxylase [Homo sapiens]
50	5805196 Fas associated factor 1 [Homo sapiens]
51	2104553 Myosin heavy chain (MHY11) (5'partial) [Homo sapiens]
52	62822517 unknown [Homo sapiens]
53	62822099 unknown [Homo sapiens]
54	62630102 unknown [Homo sapiens]
55	11890755 RNA helicase II/Gu protein [Homo sapiens]
56	4583679 vacuolar protein sorting [Homo sapiens]
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40807213	FAM179B protein [Homo sapiens]
62088708	ATP-binding cassette, sub-family F, member 1 variant [Homo sapiens]
62087794	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1 variant [Homo sapiens]
115333997	145 kDa nucleolar protein [Homo sapiens]
39644893	FOXRED1 protein [Homo sapiens]
63089650	unnamed protein product [Homo sapiens]
40980242	unnamed protein product [Homo sapiens]
40976912	unnamed protein product [Homo sapiens]
40976232	unnamed protein product [Homo sapiens]
313223	transcription elongation factor [Homo sapiens]
20521792	KIAA1208 protein [Homo sapiens]
1663704	KIAA0242 protein [Homo sapiens]
550545215	Chain D, 14-3-3gamma Complexed With The N-terminal Sequence Of Tyrosine Hydroxylase (residues 1-43)
296863377	Chain A, Crystal Structure Of The Catalytic Domain Of Flj14393
530418458	PREDICTED: cytochrome c oxidase subunit 4 isoform 2, mitochondrial isoform X3 [Homo sapiens]
530411223	PREDICTED: Golgi SNAP receptor complex member 1 isoform X2 [Homo sapiens]
530404104	PREDICTED: exonuclease 3'-5' domain-containing protein 2 isoform X4 [Homo sapiens]
530392546	PREDICTED: glycylopeptide N-tetradecanoyltransferase 2 isoform X1 [Homo sapiens]
530382430	PREDICTED: dystonin isoform X7 [Homo sapiens]
578806816	PREDICTED: 26S proteasome non-ATPase regulatory subunit 6 isoform X3 [Homo sapiens]
530369227	PREDICTED: rho guanine nucleotide exchange factor 4 isoform X2 [Homo sapiens]
530363026	PREDICTED: outer dense fiber protein 2-like isoform X4 [Homo sapiens]
519674682	immunoglobulin A heavy chain variable region, partial [Homo sapiens]
381142222	immunoglobulin light chain variable region, partial [Homo sapiens]
459214638	KIF5B-RET(NM_020630)_K24;R11 fusion protein [Homo sapiens]
442564354	von Willebrand factor [Homo sapiens]
374074366	Chain A, Crystal Structure Of 14-3-3 Epsilon With Mlf1 Peptide
319443270	Chain A, Nmr Structure Of Calcium-Loaded Stim2 Ef-Sam.
190406	profilaggrin, partial [Homo sapiens]
14625824	moesin/anaplastic lymphoma kinase fusion protein [Homo sapiens]
403456	26S protease (S4) regulatory subunit [Homo sapiens]
62871194	immunoglobulin alpha heavy chain variable region [Homo sapiens]
609412463	Chain D, Crystal Structure Of Human Lnhk2b-h2a.z-anp32e
578837382	PREDICTED: putative SEC14-like protein 6 isoform X3 [Homo sapiens]
578837055	PREDICTED: calcineurin-binding protein cabin-1 isoform X12 [Homo sapiens]
578832590	PREDICTED: zinc finger protein 407 isoform X3 [Homo sapiens]
578831328	PREDICTED: actin, cytoplasmic 2 isoform X1 [Homo sapiens]
578826913	PREDICTED: SHC-transforming protein 4 isoform X3 [Homo sapiens]
578808176	PREDICTED: SH3 domain and tetratricopeptide repeat-containing protein 1 isoform X7 [Homo sapiens]
578807393	PREDICTED: leucine-, glutamate- and lysine-rich protein 1 isoform X7 [Homo sapiens]
578804532	PREDICTED: telomere-associated protein RIF1 isoform X4 [Homo sapiens]
38305350	antigen MLAA-44 [Homo sapiens]
2253417	Trip230 [Homo sapiens]
284930095	Treslin [Homo sapiens]
11527207	CGI-85 [Homo sapiens]
40286771	brain leucine zipper protein [Homo sapiens]
52545570	hypothetical protein [Homo sapiens]
21739524	hypothetical protein [Homo sapiens]
13093781	hypothetical protein [Homo sapiens]
12052969	hypothetical protein [Homo sapiens]
51476290	hypothetical protein [Homo sapiens]
23712	myoblast antigen 24.1D5 [Homo sapiens]
62897645	eukaryotic translation elongation factor 1 alpha 1 variant [Homo sapiens]
133251534	piwi-like 1 [Homo sapiens]
29823335	unnamed protein product [Homo sapiens]

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38.69	20.49	121	5	13	15			
18.27	20.77	21	5	8	9			
14.54	35.61	4	5	6	6			
15.71	5.28	9	5	6	6			
11.03	5.23	30	5	5	5			
17.65	6.59	17	4	9	11			
10.05	2.90	18	4	4	4			
17.31	48.89	5	4	4	5			
13.88	16.61	1	4	4	4			
11.04	19.33	14	4	4	4			
9.60	4.07	30	4	4	4			
59.05	41.50	17	4	15	25			
8.84	23.03	18	4	4	4			
75.69	31.78	56	4	17	32			
15.21	19.75	23	4	5	5			
10.88	27.06	4	4	4	4			
12.94	1.36	43	4	6	6			
24.04	10.23	51	4	5	10			
13.70	23.18	10	4	4	4			
11.45	2.36	13	4	6	6			
10.34	19.35	5	4	4	5			
55.35	42.17	78	4	14	19			
8.80	9.42	4	4	4	4			
10.21	12.07	19	4	5	5			
11.62	25.59	8	4	5	5			
8.78	6.91	18	4	4	4			
8.37	14.17	19	4	4	4			
9.85	16.28	26	4	4	4			
11.23	10.59	21	4	5	5			
10.13	11.60	16	4	4	4			
6.01	16.27	12	3	3	3			
7.53	13.71	12	3	3	3			
5.81	19.62	2	3	3	3			
7.59	18.54	2	3	3	3			
9.12	2.38	8	3	3	4			
12.15	0.81	58	3	6	6			
13.50	3.38	74	3	5	7			
14.01	1.72	8	3	4	6			
21.53	20.97	37	3	6	6			
6.59	3.70	12	3	3	3			
8.84	21.34	11	3	3	4			
7.35	2.12	15	3	3	3			
7.00	3.36	5	3	3	3			
7.57	0.82	25	3	3	4			
6.55	8.26	31	3	3	3			
21.94	10.13	261	3	4	9			
414.86	40.55	10	3	6	136			
12.97	2.35	17	3	6	7			
21.49	27.08	28	3	8	9			
15.08	1.60	213	3	7	8			
8.53	5.08	11	3	3	3			
9.85	26.96	14	3	3	4			
8.43	1.59	11	3	4	4			
9.72	5.11	6	3	4	4			
11.52	0.48	96	3	4	6			



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14.03	7.82	20	3	5	6		
5.35	0.74	8	3	3	3		
37.71	22.30	61	3	11	17		
8.87	6.24	11	3	4	4		
5.65	11.44	10	3	3	3		
9.41	10.32	21	3	4	4		
9.41	6.58	10	3	3	3		
9.43	12.11	19	3	3	5		
11.41	1.42	7	3	3	6		
9.70	20.00	20	3	4	4		
7.81	10.02	23	3	3	3		
6.22	20.15	8	3	3	3		
10.03	7.44	18	3	4	4		
6.61	11.27	89	3	3	3		
8.79	12.36	6	3	3	3		
5.46	1.20	2	3	3	3		
5.38	15.86	9	2	2	2		
5.64	1.80	46	2	3	3		
5.37	0.62	6	2	2	3		
4.93	15.13	13	2	2	2		
4.25	6.15	5	2	2	2		
11.37	7.04	105	2	5	6		
32.38	28.46	39	2	8	13		
21.82	3.67	6	2	2	10		
4.02	20.95	7	2	2	2		
22.56	33.33	1	2	2	10		
4.04	5.92	7	2	2	2		
4.65	13.79	4	2	2	2		
12.78	1.29	95	2	3	7		
9.78	19.91	7	2	3	4		
405.11	58.70	29	2	42	138		
5.79	15.89	2	2	2	2		
6.13	2.23	19	2	3	3		
5.65	2.14	29	2	2	3		
5.23	3.79	14	2	3	3		
4.21	16.42	1	2	2	2		
4.05	1.49	27	2	2	2		
36.04	3.12	22	2	3	17		
13.25	2.75	6	2	2	5		
4.33	11.66	6	2	2	2		
9.00	15.96	2	2	2	3		
6.86	3.75	9	2	2	3		
3.71	2.33	10	2	2	2		
4.17	5.22	18	2	2	2		
4.65	1.55	1	2	2	2		
4.49	9.05	8	2	2	2		
9.48	2.29	13	2	3	4		
9.68	1.60	15	2	3	4		
6.47	0.86	3	2	3	3		
3.82	2.74	2	2	2	2		
7.77	22.73	7	2	2	2		
6.57	1.65	7	2	3	3		
11.49	1.39	36	2	3	6		
4.68	11.51	12	2	2	2		
10.44	4.24	38	2	3	6		



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7.72	14.72	20	2	4	4			
3.64	2.16	28	2	2	2			
3.87	44.74	1	2	2	2			
13.29	1.52	8	2	4	6			
180.52	2.07	36	2	2	85			
5.50	15.22	13	2	2	2			
6.85	8.65	15	2	2	3			
23.68	2.23	50	2	3	15			
4.61	7.42	12	2	2	2			
9.19	3.84	4	2	3	5			
5.29	3.00	181	2	4	4			
4.72	1.60	7	2	2	2			
4.72	16.96	8	2	2	2			
5.88	6.90	20	2	2	2			
5.35	29.06	12	2	2	2			
3.66	2.08	8	2	2	2			
4.63	9.63	5	2	2	2			
4.24	4.56	14	2	2	2			
36.09	3.11	13	2	2	16			
6.37	10.55	19	2	3	3			
10.49	8.30	29	2	4	5			
8.03	3.45	3	2	2	4			
10.25	9.17	13	2	2	5			
7.28	7.87	2	2	2	4			
6.89	2.87	6	2	2	3			
4.68	11.65	22	2	2	2			
9.82	3.71	88	2	3	5			
10.26	8.78	7	2	2	4			
8.08	0.94	13	2	2	4			
12.58	5.90	11	2	3	6			
10.41	1.94	6	2	3	6			
9.21	5.81	1	2	3	4			
5.55	1.18	12	2	2	3			
3.56	4.03	11	2	2	2			
4.65	1.14	19	2	2	2			
5.36	1.15	6	2	3	3			
44.54	1.11	4	2	2	20			
4.81	23.08	2	2	2	7			
7.98	2.39	3	2	2	3			
39.43	44.87	103	2	7	16			
4.96	10.33	13	2	2	3			
10.28	15.60	13	2	3	3			
5.32	16.67	10	2	2	2			
6.09	4.90	11	2	2	2			
4.79	21.84	6	2	2	2			
8.27	1.19	11	2	3	5			
4.47	0.76	8	2	2	2			
9.80	5.73	90	2	3	5			
7.52	4.08	9	2	2	4			
32.57	8.02	30	2	13	13			
4.20	8.05	11	2	2	2			
5.97	5.18	29	2	2	3			
5.90	0.76	32	2	3	3			
5.55	4.62	4	2	2	2			
106.07	7.89	12	2	2	47			

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9.17	3.51	5	2	2	4			
6.55	5.06	57	2	3	3			
16.35	5.16	19	2	3	8			
4.68	4.93	3	2	2	2			
4.20	7.90	13	2	2	2			
5.09	13.13	1	2	2	2			
8.51	42.00	1	2	3	5			
5.71	16.08	10	2	2	2			
4.68	25.81	11	2	2	2			
3.93	7.97	10	2	2	2			
3.74	2.21	12	2	2	2			
25.68	7.56	6	2	2	11			
10.30	24.71	42	2	5	5			
7.17	4.98	37	2	3	4			
3.86	18.11	6	2	2	2			
3.72	7.72	7	2	2	2			
4.21	10.93	8	2	2	2			
18.56	6.87	20	2	2	8			
16.43	1.13	35	2	6	7			
6.98	8.82	7	2	3	3			
3.14	0.65	17	2	2	2			
7.18	6.50	14	2	3	3			
49.28	11.97	1	2	2	22			
4.42	30.19	1	2	2	2			
10.77	4.10	45	2	5	5			
3.65	0.59	30	2	2	2			
6.71	16.81	16	2	3	3			
10.11	7.33	12	2	2	6			
4.12	1.40	13	2	2	2			
4.56	3.61	35	2	2	2			
3.71	3.41	10	2	2	2			
10.43	11.73	13	2	2	5			
10.86	15.31	65	2	3	4			
3.61	5.59	17	2	2	2			
12.19	2.10	42	2	2	6			
7.82	1.66	8	2	3	4			
40.33	21.15	108	2	9	16			
4.12	5.64	20	2	2	2			
6.01	1.63	16	2	2	3			
56.25	5.28	10	2	3	24			
4.58	0.90	29	2	3	3			
3.10	4.02	26	2	2	2			
13.38	1.97	11	2	4	6			
3.16	0.58	19	2	2	2			
3.66	7.92	10	2	2	2			
6.36	9.77	8	2	3	3			
3.15	1.09	15	2	2	2			
26.00	3.82	12	2	5	13			
3.17	3.17	10	2	2	2			
4.34	6.65	2	2	2	2			
3.60	1.73	15	2	2	2			
4.38	6.57	10	2	2	2			
55.32	35.57	6	2	13	25			
6.44	3.77	49	2	3	4			
7.32	1.65	4	2	2	3			

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13.52	7.13	22	2	5	5			
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For Peer Review

Pfam IDs	# AAs	MW [kDa]	calc. pI
Retrival Error	1960	226.4	5.60
Retrival Error	645	65.8	8.00
Retrival Error	4684	531.5	5.96
Retrival Error	646	70.9	5.52
Retrival Error	623	62.0	5.24
Retrival Error	440	47.7	5.22
Retrival Error	231	24.3	7.91
Retrival Error	547	58.6	7.72
Retrival Error	339	38.6	7.75
Retrival Error	34942	3878.8	6.38
Retrival Error	213	23.3	8.29
Retrival Error	624	63.3	5.21
Retrival Error	707	76.3	4.69
Retrival Error	458	50.6	6.67
Retrival Error	2388	261.2	8.47
Retrival Error	624	69.6	6.44
Retrival Error	1639	187.8	5.69
Retrival Error	518	56.5	7.83
Retrival Error	569	60.6	6.04
Retrival Error	665	72.4	5.94
Retrival Error	2427	279.3	5.36
Retrival Error	473	51.2	5.05
Retrival Error	285	33.7	9.36
Retrival Error	293	31.5	7.61
Retrival Error	416	46.3	5.08
Retrival Error	530	56.8	6.87
Retrival Error	217	24.8	9.94
Retrival Error	596	68.2	5.85
Retrival Error	242	26.5	9.66
Retrival Error	721	79.7	5.99
Retrival Error	2578	275.5	5.81
Retrival Error	414	46.4	7.47
Retrival Error	152	17.7	10.99
Retrival Error	2315	245.7	5.97
Retrival Error	192	20.7	6.87
Retrival Error	6907	780.1	6.71
Retrival Error	4236	485.7	6.35
Retrival Error	333	37.6	11.03
Retrival Error	622	69.8	6.55
Retrival Error	398	45.4	10.15
Retrival Error	650	74.7	5.14
Retrival Error	221	24.2	9.79
Retrival Error	1173	138.3	6.55
Retrival Error	858	95.3	6.83
Retrival Error	618	67.5	5.50
Retrival Error	164	17.9	7.81
Retrival Error	129	14.4	10.23
Retrival Error	419	47.3	8.92
Retrival Error	266	30.1	10.74
Retrival Error	389	44.6	6.47
Retrival Error	248	29.2	10.65
Retrival Error	466	53.7	5.10
Retrival Error	218	23.6	10.92
Retrival Error	280	30.9	4.84

Peer Review

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2	Retrival Error	732	84.6	5.02
3	Retrival Error	260	31.2	9.06
4	Retrival Error	278	29.7	5.68
5	Retrival Error	1382	166.4	6.79
6	Retrival Error	1262	144.4	6.04
7	Retrival Error	5890	628.7	6.15
8	Retrival Error	2272	260.0	6.96
9	Retrival Error	135	15.5	9.85
10	Retrival Error	307	34.9	9.57
11	Retrival Error	300	33.3	5.07
12	Retrival Error	958	96.7	5.62
13	Retrival Error	441	47.8	9.03
14	Retrival Error	178	20.5	10.52
15	Retrival Error	472	51.6	5.16
16	Retrival Error	314	35.0	7.78
17	Retrival Error	170	19.4	10.26
18	Retrival Error	6391	740.0	9.11
19	Retrival Error	518	59.6	7.24
20	Retrival Error	151	16.3	10.89
21	Retrival Error	2801	308.6	9.51
22	Retrival Error	124	13.6	9.99
23	Retrival Error	415	46.5	4.93
24	Retrival Error	669	74.2	8.54
25	Retrival Error	522	58.2	5.29
26	Retrival Error	211	24.3	11.65
27	Retrival Error	550	60.8	7.55
28	Retrival Error	247	28.4	10.84
29	Retrival Error	258	29.3	9.77
30	Retrival Error	746	81.7	7.55
31	Retrival Error	362	40.2	7.88
32	Retrival Error	166	18.5	8.09
33	Retrival Error	248	27.9	8.46
34	Retrival Error	158	18.4	10.30
35	Retrival Error	151	16.3	10.05
36	Retrival Error	2017	223.6	8.75
37	Retrival Error	6825	788.0	5.47
38	Retrival Error	1300	149.5	5.71
39	Retrival Error	4471	514.5	5.88
40	Retrival Error	267	29.4	9.14
41	Retrival Error	947	106.6	6.47
42	Retrival Error	164	19.3	11.93
43	Retrival Error	2266	252.3	6.60
44	Retrival Error	1011	111.7	6.76
45	Retrival Error	3184	367.2	5.02
46	Retrival Error	363	39.3	8.09
47	Retrival Error	523	56.7	8.41
48	Retrival Error	217	23.3	6.90
49	Retrival Error	2083	244.4	5.34
50	Retrival Error	336	36.3	6.90
51	Retrival Error	3562	412.2	5.86
52	Retrival Error	846	93.8	4.77
53	Retrival Error	115	13.0	11.00
54	Retrival Error	4033	458.5	7.08
55	Retrival Error	1349	152.0	9.42
56	Retrival Error	6616	720.7	5.81
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2	Retrival Error	780	87.7	5.17
3	Retrival Error	3528	394.8	9.19
4	Retrival Error	426	47.6	5.02
5	Retrival Error	705	78.3	7.27
6	Retrival Error	201	23.4	10.93
7	Retrival Error	465	53.2	6.40
8	Retrival Error	593	66.7	5.63
9	Retrival Error	223	25.1	10.99
10	Retrival Error	2467	283.5	6.48
11	Retrival Error	230	26.3	5.06
12	Retrival Error	489	54.4	5.68
13	Retrival Error	134	14.1	10.26
14	Retrival Error	833	92.5	5.44
15	Retrival Error	284	33.1	4.79
16	Retrival Error	445	48.1	5.07
17	Retrival Error	2334	258.2	6.60
18	Retrival Error	145	17.2	10.55
19	Retrival Error	1941	222.9	5.82
20	Retrival Error	3396	372.6	4.51
21	Retrival Error	119	13.4	9.94
22	Retrival Error	325	36.5	5.64
23	Retrival Error	724	83.5	6.16
24	Retrival Error	376	41.8	5.48
25	Retrival Error	762	83.7	4.74
26	Retrival Error	148	16.8	9.38
27	Retrival Error	51	5.6	10.13
28	Retrival Error	439	49.6	9.03
29	Retrival Error	145	16.1	10.32
30	Retrival Error	2488	268.0	9.03
31	Retrival Error	221	22.3	11.02
32	Retrival Error	644	66.0	8.12
33	Retrival Error	151	17.2	10.54
34	Retrival Error	1257	144.7	6.74
35	Retrival Error	1261	138.8	7.24
36	Retrival Error	924	107.5	7.99
37	Retrival Error	201	23.3	8.24
38	Retrival Error	1951	221.3	5.72
39	Retrival Error	1185	132.3	5.74
40	Retrival Error	909	105.1	7.93
41	Retrival Error	283	31.3	6.99
42	Retrival Error	188	19.6	8.03
43	Retrival Error	507	56.4	6.49
44	Retrival Error	688	78.6	8.84
45	Retrival Error	460	52.8	7.44
46	Retrival Error	1873	210.7	6.20
47	Retrival Error	398	44.8	8.18
48	Retrival Error	1659	190.4	7.62
49	Retrival Error	2002	226.5	6.20
50	Retrival Error	4427	507.4	6.37
51	Retrival Error	877	99.0	5.16
52	Retrival Error	132	14.2	8.65
53	Retrival Error	2608	276.8	8.81
54	Retrival Error	863	96.1	8.35
55	Retrival Error	139	16.6	11.06
56	Retrival Error	920	104.9	6.10
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2	Retrival Error	3507	399.6	6.93
3	Retrival Error	158	17.6	4.86
4	Retrival Error	202	22.8	8.50
5	Retrival Error	196	22.0	5.63
6	Retrival Error	94	10.7	8.72
7	Retrival Error	241	26.7	8.15
8	Retrival Error	448	49.5	6.19
9	Retrival Error	442	50.3	7.99
10	Retrival Error	498	54.9	10.07
11	Retrival Error	498	57.0	6.83
12	Retrival Error	291	33.1	9.29
13	Retrival Error	316	36.5	6.37
14	Retrival Error	2458	267.9	7.83
15	Retrival Error	352	38.9	4.94
16	Retrival Error	4462	509.0	5.72
17	Retrival Error	182	21.2	7.34
18	Retrival Error	126	13.7	7.30
19	Retrival Error	956	107.8	8.48
20	Retrival Error	99	11.2	9.44
21	Retrival Error	113	12.0	8.94
22	Retrival Error	1450	160.7	6.37
23	Retrival Error	616	69.8	8.46
24	Retrival Error	284	31.2	9.32
25	Retrival Error	539	58.5	6.09
26	Retrival Error	2352	264.9	6.11
27	Retrival Error	874	95.4	5.73
28	Retrival Error	1976	228.8	5.54
29	Retrival Error	563	64.6	5.87
30	Retrival Error	214	23.6	8.29
31	Retrival Error	6929	784.5	8.88
32	Retrival Error	486	54.4	8.98
33	Retrival Error	116	13.4	10.20
34	Retrival Error	578	68.0	7.94
35	Retrival Error	1156	127.3	5.63
36	Retrival Error	1257	140.7	6.96
37	Retrival Error	129	14.5	5.91
38	Retrival Error	426	46.1	6.54
39	Retrival Error	2342	256.6	4.78
40	Retrival Error	301	32.5	8.72
41	Retrival Error	805	88.8	6.92
42	Retrival Error	135	15.2	9.44
43	Retrival Error	3674	416.6	6.67
44	Retrival Error	1647	184.1	5.54
45	Retrival Error	2349	265.4	5.07
46	Retrival Error	772	89.2	5.20
47	Retrival Error	599	68.2	6.02
48	Retrival Error	251	27.6	9.57
49	Retrival Error	397	46.4	8.31
50	Retrival Error	1641	186.7	6.84
51	Retrival Error	606	67.1	9.89
52	Retrival Error	872	98.2	7.65
53	Retrival Error	2330	261.7	7.58
54	Retrival Error	1310	145.5	5.22
55	Retrival Error	2884	324.6	6.79
56	Retrival Error	4919	535.9	6.30
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Peer Review

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2	Retrival Error	231	26.1	9.99
3	Retrival Error	1019	110.0	9.29
4	Retrival Error	38	4.5	10.54
5	Retrival Error	4024	460.8	5.99
6	Retrival Error	1254	141.6	6.55
7	Retrival Error	184	21.4	10.20
8	Retrival Error	393	43.7	6.95
9	Retrival Error	539	58.7	6.34
10	Retrival Error	418	47.4	6.71
11	Retrival Error	963	107.8	5.67
12	Retrival Error	1066	119.1	6.62
13	Retrival Error	1752	202.0	7.55
14	Retrival Error	171	20.0	9.42
15	Retrival Error	406	46.0	8.34
16	Retrival Error	117	12.9	6.15
17	Retrival Error	1008	113.4	9.77
18	Retrival Error	270	29.9	7.85
19	Retrival Error	439	48.5	5.92
20	Retrival Error	900	101.2	7.40
21	Retrival Error	275	30.5	7.66
22	Retrival Error	470	53.6	5.47
23	Retrival Error	406	47.6	8.69
24	Retrival Error	327	36.8	9.23
25	Retrival Error	254	28.7	5.71
26	Retrival Error	627	71.5	8.62
27	Retrival Error	266	29.4	10.23
28	Retrival Error	512	58.7	5.58
29	Retrival Error	524	57.0	5.55
30	Retrival Error	2992	340.2	6.16
31	Retrival Error	424	48.5	5.69
32	Retrival Error	1340	150.9	8.22
33	Retrival Error	1033	119.4	6.98
34	Retrival Error	1268	143.5	6.58
35	Retrival Error	471	52.5	8.51
36	Retrival Error	2187	245.6	5.15
37	Retrival Error	2093	229.8	7.34
38	Retrival Error	2252	248.2	5.83
39	Retrival Error	104	12.7	11.93
40	Retrival Error	1714	175.4	8.27
41	Retrival Error	156	17.9	9.60
42	Retrival Error	426	48.6	7.18
43	Retrival Error	250	27.0	7.69
44	Retrival Error	246	28.0	7.42
45	Retrival Error	408	44.4	9.39
46	Retrival Error	174	20.2	8.50
47	Retrival Error	2022	228.5	9.29
48	Retrival Error	2504	272.9	6.67
49	Retrival Error	593	66.8	7.75
50	Retrival Error	490	55.9	5.16
51	Retrival Error	1857	214.2	5.54
52	Retrival Error	472	53.4	8.59
53	Retrival Error	367	42.3	8.63
54	Retrival Error	3929	441.5	7.46
55	Retrival Error	715	79.6	9.35
56	Retrival Error	570	65.0	8.29
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2	Retrival Error	798	88.3	8.82
3	Retrival Error	593	67.4	7.71
4	Retrival Error	698	80.4	7.74
5	Retrival Error	812	93.5	5.69
6	Retrival Error	367	40.7	5.69
7	Retrival Error	198	22.2	10.76
8	Retrival Error	50	5.9	9.70
9	Retrival Error	143	16.7	10.52
10	Retrival Error	124	14.8	6.39
11	Retrival Error	301	34.0	8.05
12	Retrival Error	950	108.7	7.12
13	Retrival Error	529	59.1	6.95
14	Retrival Error	255	29.1	5.00
15	Retrival Error	442	50.4	6.39
16	Retrival Error	127	14.6	9.60
17	Retrival Error	298	34.2	9.85
18	Retrival Error	366	42.3	8.69
19	Retrival Error	495	56.7	7.75
20	Retrival Error	7723	875.9	5.26
21	Retrival Error	340	40.0	6.02
22	Retrival Error	1839	201.3	6.62
23	Retrival Error	554	64.1	6.42
24	Retrival Error	117	12.6	7.96
25	Retrival Error	106	11.4	7.28
26	Retrival Error	1366	155.7	6.54
27	Retrival Error	2715	298.2	5.48
28	Retrival Error	232	26.6	5.02
29	Retrival Error	150	17.8	5.73
30	Retrival Error	1218	133.5	9.64
31	Retrival Error	527	61.8	7.81
32	Retrival Error	440	49.2	5.96
33	Retrival Error	162	17.4	5.14
34	Retrival Error	209	22.5	10.23
35	Retrival Error	322	35.9	8.06
36	Retrival Error	1189	134.8	5.92
37	Retrival Error	1628	180.5	6.93
38	Retrival Error	468	51.2	7.20
39	Retrival Error	585	63.6	7.24
40	Retrival Error	1043	115.0	6.58
41	Retrival Error	568	65.5	8.94
42	Retrival Error	2436	270.5	5.53
43	Retrival Error	373	42.8	5.21
44	Retrival Error	1978	227.4	5.30
45	Retrival Error	1909	210.6	8.78
46	Retrival Error	265	30.3	9.14
47	Retrival Error	399	45.0	7.58
48	Retrival Error	1198	136.3	8.59
49	Retrival Error	1230	140.1	6.80
50	Retrival Error	410	48.5	7.93
51	Retrival Error	331	38.2	5.44
52	Retrival Error	1385	155.7	7.20
53	Retrival Error	396	45.2	6.76
54	Retrival Error	433	46.9	9.11
55	Retrival Error	530	61.0	9.74
56	Retrival Error	2367	257.2	5.71
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Peer Review

Retrival Error	884	102.2	5.44
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