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Simvastatin suppresses experimental aortic aneurysm expansion

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Objective: **Abdominal aortic aneurysm (AAA) formation is a result of inflammation and extracellular matrix (ECM) remodeling mediated by matrix metalloproteinases (MMPs). Hydroxymethylglutaryl-coenzyme A inhibitors (statins), although clinically used as lipid-lowering agents, have also been demonstrated to have anti-inflammatory effects. This study was designed to determine whether the hydroxymethylglutaryl-coenzyme A inhibitor simvastatin suppresses aneurysm formation in an elastase-induced rat AAA model.**

Methods: **Aneurysms were created in adult male Wistar rats by infusion of elastase into isolated infrarenal aortic segments. The rats were randomized to receive either simvastatin (n = 17) or placebo (n = 17) by gastric lavage daily starting the day before surgery. The rats were euthanized and the infrarenal aortas harvested on postoperative day 7. Aortic diameters were measured before infusion, immediately after infusion, and at the time of harvesting. Protein expression was measured by immunoblot analysis. Gene expression profiling using Affymetrix U34A rat genome chips was performed to identify changes in gene expression caused by simvastatin treatment.**

Results: **Mean aneurysm diameter was significantly less in the simvastatin treatment group compared with controls (3.4 ± 0.08 mm vs 4.3 ± 0.19 mm; $P = .0001$). MMP-9 and nuclear factor-κB protein levels were decreased in the aortas of simvastatin-treated animals. Gene microarray analysis revealed 315 genes with statistically significant changes in expression ($P < .05$) in the simvastatin group. Genes related to inflammation, ECM remodeling, and oxidative stress function were downregulated. These included genes for interleukin 1, interleukin 4, inducible nitric oxide synthase, P-selectin, platelet-derived growth factor α, tumor necrosis factor, and several chemokines.**

Conclusions: **Simvastatin significantly suppresses experimental aneurysm expansion and reduces protein levels of MMP-9 and nuclear factor-κB. Gene array analysis provides evidence that several mediators of inflammation, matrix remodeling, and oxidative stress are downregulated by simvastatin treatment. This suggests that simvastatin inhibits AAA formation by blocking the expression of certain proinflammatory genes. Simvastatin may be useful as an adjuvant therapy to suppress the growth of small aneurysms. (J Vasc Surg 2006;43:117-124.)**

Clinical Relevance: **Human aortic aneurysms are characterized histologically by an inflammatory infiltrate with severe proteolytic destruction. Statins, although used clinically as lipid-lowering agents, have been shown to have anti-inflammatory effects. Simvastatin reduced experimental aneurysm size in this study. It seems that this reduction is mediated by interfering with multiple pathways, including oxidative stress, inflammation, and ECM and matrix remodeling. Further study into the effect of statins in reducing the growth of AAAs in patients is warranted.**

Investigation into the pathophysiology of abdominal aortic aneurysms (AAAs) has focused on inflammation as playing a critical role in the development of AAA. Therefore, drugs that decrease inflammation could be of potential benefit to patients with aneurysms. The objective of these treatments would be to stabilize aneurysmal disease and prevent further expansion, thus delaying or eliminating the need for surgery.

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The rat aneurysm model is an established method of creating experimental aortic aneurysms by intra-aortic infusion of porcine pancreatic elastase. Aneurysm development in this rat model is associated with production of inducible nitric oxide synthase (iNOS),[1] increased expression of matrix metalloproteinase (MMP)-9,[1,2] an inflammatory infiltrate,[2,3] and destruction of extracellular matrix (ECM).[1-4] Agents that block these activities have been shown to suppress the expansion of experimental aneurysms.[1,5-7]

Hydroxymethylglutaryl-coenzyme A reductase inhibitors, also known as statins, are widely prescribed for their lipid-lowering effects. In addition, statins have specific effects on inflammation. Statins have been shown to block the activation of nuclear factor (NF)-κB, a transcription factor involved in the activation of gene expression during inflammation.[8] Statins also inhibit the expression of iNOS and several MMPs, including MMP-9, by smooth muscle cells and macrophages.[9] These effects of statins might be attributed to interference with the protein isoprenylation

that mediates activation of upstream signaling pathways in inflammation.[10] Statins can directly modulate the biology of the AAA wall in humans and can suppress MMP-9 production by inhibiting the activation of neutrophils and macrophages; this indicates that statin therapy could be an effective treatment for AAA patients.[11]

The evidence supporting an inflammatory cause of aortic aneurysms and the effects on NF-κB, iNOS, and MMP-9 produced by statins in cell studies prompted us to investigate the effects of statins on experimental AAAs. We also performed a gene array analysis in an attempt to elucidate the mechanism of action of statins on aneurysm formation.

METHODS

Animal surgery, aortic infusion, and drug administration. Experimental aortic aneurysms were created in adult male Wistar rats (240-340 g) by infusion of elastase as described previously,[12] as modified by our laboratory.[5,13] With rats under isoflurane anesthesia, a midline laparotomy was performed, and the infrarenal aorta was dissected. Lumbar arterial branches in this region were ligated. After proximal and distal ties were secured, a mattress stitch was placed in the anterior aorta. The isolated infrarenal aorta was then cannulated with a 27-gauge needle and infused with 1 mL (22 U/mL) of porcine pancreatic elastase solution (Sigma Chemical Co, St Louis, Mo) for 1 hour with a microinfusion pump (Harvard Apparatus, Holliston, Mass). The needle was then removed, the mattress stitch was tied, and blood flow was restored to the legs. The fascia was sutured, and skin wounds were stapled. The rats were allowed to recover, were individually housed, and were provided with standard rat chow and water ad libitum. The rats underwent repeat exploration on postoperative day 7. Measurements of aortic diameter were made with an ocular micrometer with 0.1-mm gradations at ×10 power mounted on the operating microscope. Animal care complied with the *Guide for the Care and Use of Laboratory Animals* (Institute of Laboratory Animal Resources, Commission on Life Sciences, and National Research Council). The study was approved by the Institutional Animal Care and Use Committee.

Before surgery, rats were randomized into experimental (n = 19) and control (n = 19) groups. The investigators were blinded to treatment. All treatments were started the day before the operation and were administered via gastric lavage with an animal feeding needle. The control group received tap water (1 mL/d), and the treatment group received simvastatin ($60\ mg \cdot kg^{-1} \cdot d^{-1}$ in 1 mL of water). Dosing was repeated daily until harvest. The dose of simvastatin was comparable to doses used in previous studies in rats.[14,15]

Seventeen rats per group survived to postoperative day 7. Two animals died from anesthesia, and two were euthanized on postoperative day 1 because of hind limb ischemia. All remaining rats were euthanized on postoperative day 7 after repeat exploration. Measurements of maximal aortic diameter were recorded before elastase infusion, immediately after elastase infusion, and before aortic harvest on postoperative day 7. Rats that did not survive to harvest were excluded, and the randomization schedule was adjusted by animal care personnel. All harvested aortic segments were flash-frozen in liquid nitrogen. Individual specimens were then used for histological, biochemical, or microarray analysis in sequential order.

Histology. Aortic segments were fixed with 10% formalin solution and embedded in paraffin. Sections were stained with hematoxylin-eosin and elastin-orcein (eight control and eight simvastatin-treated specimens). The slides were viewed with a Nikon microscope equipped with a digital camera. Inflammation and elastin preservation were quantitated on hematoxylin-eosin–stained and elastin-stained slides, as described previously.[5]

Western blot analysis. Samples from simvastatin-treated and control rats were homogenized in extraction buffer containing 1% Triton X-100. Aliquots were subjected to sodium dodecyl sulfate gel electrophoresis on 7.5 polyacrylamide gels and transferred to polyvinylidene difluoride membranes at 70 V. Membranes were blocked for 1 hour with 5% nonfat powdered milk and incubated overnight with primary antibodies. Primary antibodies used included NF-κB p65 rabbit polyclonal (1:500 dilution; Santa Cruz Biotechnology, Santa Cruz, Calif) and mouse monoclonal anti–MMP-9 (clone Ab-5, 1:250 dilution; Lab Vision Corporation, Fremont, Calif). The lower portions of all blots were incubated with mouse monoclonal anti–β-actin (1:500 dilution; Sigma) to verify equivalent gel loading. The membranes were then incubated for 30 minutes in the appropriate secondary antibody and processed for enhanced chemiluminescence. Chemiluminescence was detected and quantitated with the Lumi-imager (Boehringer Mannheim, Indianapolis, Ind). Signal intensities for MMP-9 and NF-κB bands were normalized by using the β-actin signal for each sample.

RNA extraction and microarray analysis. Total RNA was isolated from aortic samples by using TRIzol reagent (Invitrogen-Life Technologies, Carlsbad, Calif) according to the supplied protocol. The yield of RNA was determined by the measuring the absorbance at 260 and 280 nm. RNA samples were further purified by using the RNeasy Mini Kit (Qiagen, Valencia, Calif). For each sample, 10 μg of RNA was used to synthesize complementary DNA with an oligo-dT (deoxythymidine) primer containing the T7 polymerase promoter sequence. An in vitro transcription reaction was used to generate biotin-labeled chromosomal RNA from the complementary DNA template. The chromosomal RNA was fragmented, and an agarose gel was run to verify the sizes of the RNA fragments. A hybridization cocktail was then prepared by using 20 μg of fragmented chromosomal RNA. The cocktail was hybridized to a Rat Genome U34A array (Affymetrix, Santa Clara, Calif) at 45°C for 18 hours. Next, the cocktail was removed, and the arrays were washed and incubated with R-Streptavidin-Phycoerythrin (Molecular Probes, Eugene, Ore). The signal was amplified with a biotinylated anti-streptavidin antibody (Vector Laboratories, Burlingham,

Calif). The arrays were then washed, stained, and scanned by following standard Affymetrix protocols. The results were analyzed with the GeneChip Operating Software 2.1 (Affymetrix) and Spotfire Decision Site 8.1 (Spotfire, Somerville, Mass).

Quantitative reverse transcriptase-polymerase chain reaction (RT-PCR) was performed by using a Quantitect SYBR Green RT-PCR kit (Qiagen) according to the manufacturer's protocol. Reactions were prepared by using 100 ng of RNA isolated as previously described. RT-PCR analysis was performed by using a Roche Molecular Biochemicals Lightcycler, software version 3.5 (Roche, Pleasanton, Calif).

Statistical analysis. The preinfusion, postinfusion, and final diameters for the experimental and control groups were recorded, and means and standard errors were calculated. Data were analyzed by using the Student *t* test. The percentage increase of aortic diameter was defined as

[(day 7 aortic diameter − postinfusion aortic diameter)/postinfusion aortic diameter] × 100

A *P* value of ≤.05 was considered significant.

Affymetrix GeneChip Operating Software 2.1 was used to make standard adjustments for artifacts, noise, and background and to calculate a detection *P* value for each gene on each array. These data were imported into a spreadsheet, where they were sorted by the detection call. All gene probes scored as present or marginal on two or more of the arrays in one of the groups were selected for further analysis. These data were imported into Spotfire Decision Site 8.1 for further analysis. The data set was normalized by first scaling each experiment by mean followed by *z* score calculation of the gene probes. The resulting data were then analyzed using a one-way analysis of variance test to determine which genes were significantly changed. A *P* value of ≤.05 was considered significant. The Spotfire software was then used to cluster the experiments (columns) and gene probes (rows) into a heat map by using the unweighted average and Euclidean distance methods.

RESULTS

Aneurysm size. Rats were randomly assigned to receive either simvastatin or control (water) treatment. Isolated segments of rat abdominal aortas were infused with porcine pancreatic elastase to induce AAA formation. A total of 34 rats survived to postoperative day 7, when the animals were euthanized. Perioperative mortality was 11% (two rats in the control group and two rats in the simvastatin-treated group). The preinfusion aortic sizes in control rats (1.7 ± 0.04 mm) and simvastatin-treated rats (1.7 ± 0.03 mm) were not statistically different ($P = .83$). The immediate postinfusion diameters for control (2.2 ± 0.05 mm) and simvastatin-treated (2.1 ± 0.04 mm) rats were not significantly different ($P = .63$) between groups. On postoperative day 7, the mean aortic diameters were statistically different between the control and simvastatin groups. Control rats had a mean aortic diameter 4.3 ± 0.19 mm, and simvastatin-treated rats had a mean aortic diameter of 3.4 ± 0.08 mm ($P = .0001$). The increase in aortic diameter over postinfusion values was 93% ± 9% in control animals and 59% ± 5% in simvastatin-treated animals ($P = .0012$; Fig 1). The difference between preinfusion and day 7 diameters was significant in both groups ($P < .0001$).

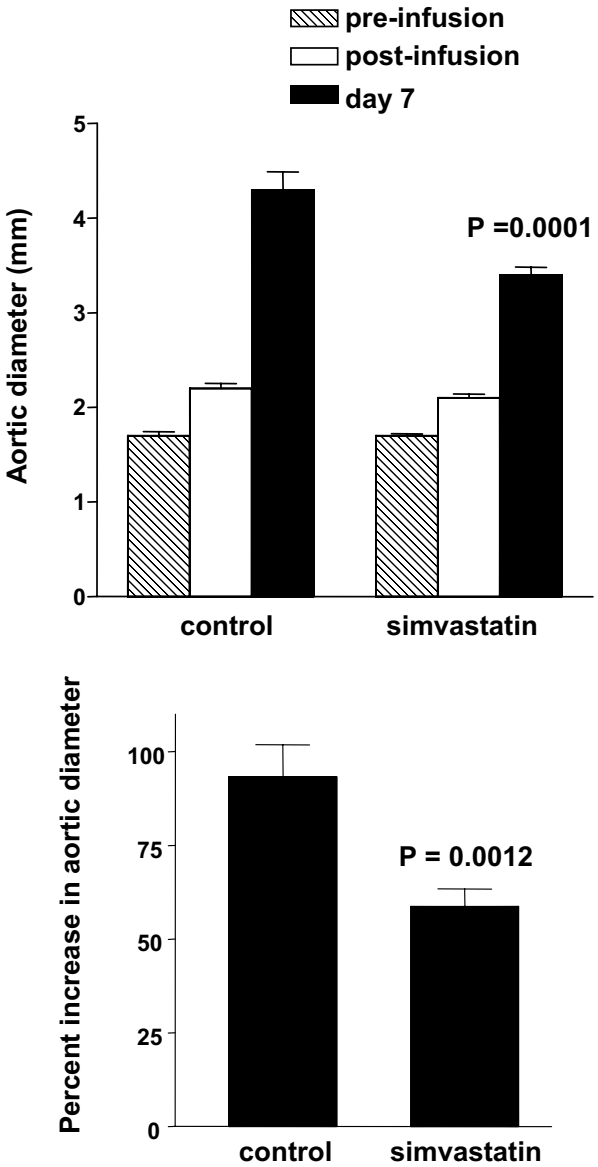

Fig 1. Effects of simvastatin on aneurysm expansion. *(Top)* Aortic diameters for control rats and simvastatin-treated rats before elastase infusion, immediately after elastase infusion, and on postoperative day 7. Simvastatin significantly inhibited aneurysm expansion on postoperative day 7 as compared with controls ($P = .0001$). *(Bottom)* The percentage increase in aortic diameter was calculated as described in Methods and was significantly less in simvastatin-treated rats ($P = .0012$).

Tissue histologic characteristics. The effects of simvastatin treatment on gross inflammation and tissue architecture were investigated by examining hematoxylin-eosin–stained and orcein-elastin–stained sections of aneurysms

from simvastatin-treated and control animals. These experiments failed to identify statistically significant differences in the scoring of elastin preservation and inflammatory cell infiltration between the two experimental groups (data not shown). These results suggest that inflammatory cell infiltration of the tissue was not affected by simvastatin treatment.

MMP-9 and NF-κB expression. Several studies have implicated increased MMP-9 expression in aneurysm formation. MMP-9 steady-state levels in the aortas of control and simvastatin-treated animals were determined by immunoblot analysis. As shown in Fig 2, simvastatin treatment caused a 64% decrease in MMP-9 levels compared with controls ($P < .05$). The decrease in MMP-9 expression in simvastatin-treated animals was confirmed by quantitative polymerase chain reaction (PCR) analysis (data not shown).

NF-κB levels were also decreased 54% in the simvastatin group compared with the control group as determined by immunoblot analysis ($P < .05$; Fig 2). This decrease was also confirmed by quantitative PCR analysis (data not shown). The reduced steady-state levels of MMP-9 and NF-κB relative to β-actin levels indicate that these reductions do not reflect reduced aneurysm size.

Gene expression profiling. To obtain additional information on the mechanism by which simvastatin treatment suppressed aneurysm formation, RNA isolated from aortas of simvastatin-treated and control animals was used for gene expression profiling by using Affymetrix U34A rat gene chips. Out of the 8879 genes represented on the chips, 315 genes showed significant differences in expression ($P \leq .05$; n = 3 per treatment group). Of these, 80% showed decreased expression in simvastatin-treated samples, and 20% showed increased expression (see the online supplement for the complete microarray expression data, including cluster analysis of all genes with significantly altered expression [Fig 3, online only], a heat map and list of oxidative genes with altered expression [Fig 4, online only], and a detailed list of significantly altered genes [Table I, online only]. Descriptions of gene probes in Table I [online only] can be found at www.affymetrix.com).

Of particular interest was the large number of simvastatin-downregulated genes that are involved in inflammation or immune system function, ECM synthesis and remodeling, and oxidative stress. Thirty-eight genes with inflammation/immune function showed decreased expression in simvastatin-treated animals. These included several gene products that promote inflammation, such as chemokines, the leukocyte adhesion molecules P-selectin and integrin αM, a tumor necrosis factor family member, and interleukin 1 and interleukin 8 receptors (Fig 5). Nineteen genes related to ECM synthesis or remodeling were downregulated in simvastatin-treated animals. These included the ECM proteins fibronectin, tenascin C, and collagen type III, and the collagen-processing enzymes procollagen lysine hydroxylase and prolyl-4-hydroxylase. Proteins involved in ECM remodeling, such as MMP-3, tissue inhibitor of metalloproteinase I, and tissue plasminogen activator, were also downregulated (Fig 6). MMP-9 expression

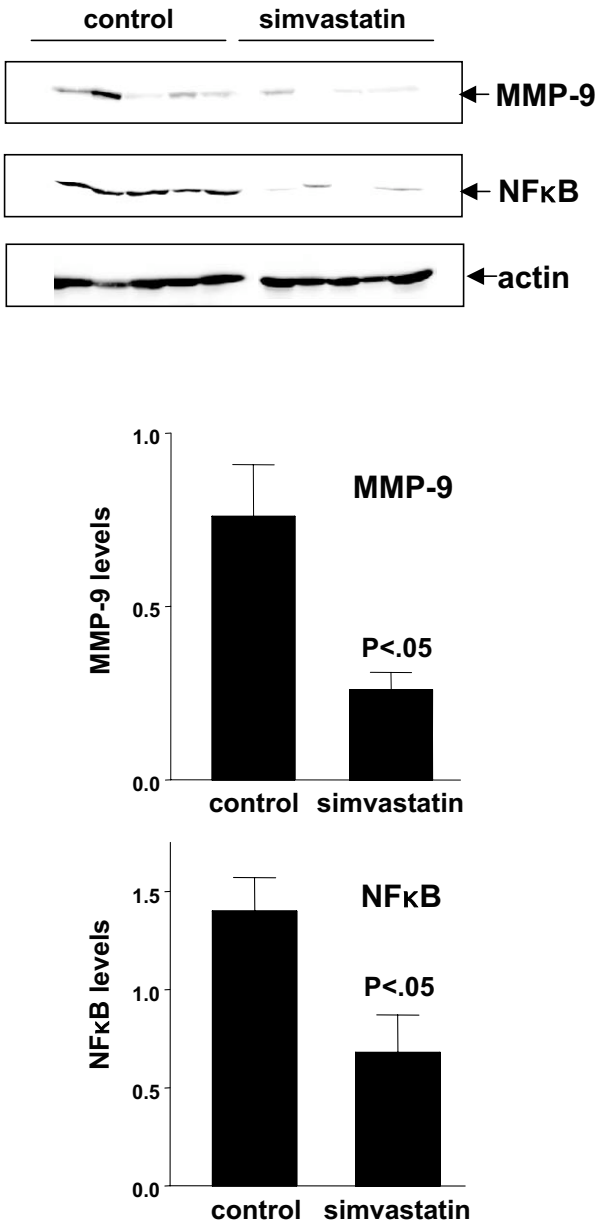

Fig 2. Western blot analysis of matrix metalloproteinase *(MMP)*-9 and nuclear factor *(NF)*-κB. Lysates of aortas from control animals and simvastatin-treated animals were subjected to Western blot analysis with anti–MMP-9 and anti–NF-κB antibodies. The *upper panels* show representative Western blots. The *bar graphs* show means and standard errors. Expression levels for MMP-9 and NF-κB were decreased in simvastatin-treated tissue ($P < .05$).

measured on the microarrays was lower in simvastatin-treated samples, but this did not reach statistical significance ($P = .1$). Genes related to oxidative stress have been reported to be upregulated during experimental aneurysm formation.[16] Simvastatin treatment caused downregulation of several oxidative stress-related genes, including thioredoxin reductase, super-

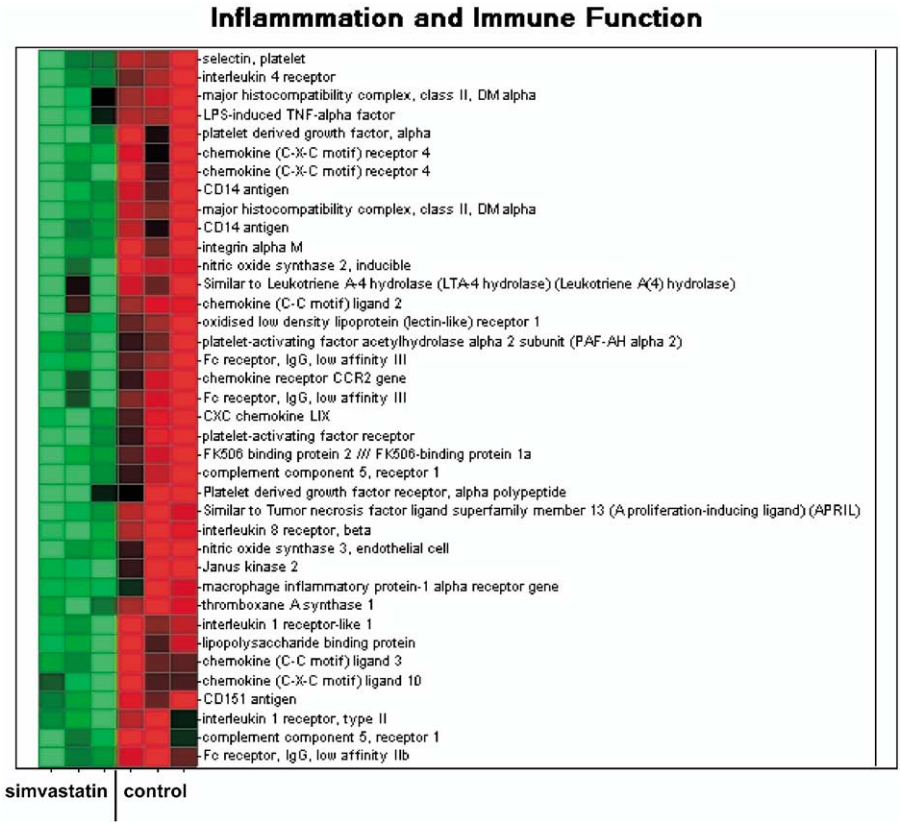

Fig 5. Microarray data for genes related to inflammation and immune function. Gene expression levels are reflected in the heat map colors. *Red* indicates increased expression; *green* indicates decreased expression. Each column represents a single aortic sample. All genes listed showed a significant decrease in expression in simvastatin-treated animals ($P < .05$). *LPS*, Lipopolysaccharide; *TNF*, tumor necrosis factor; *Ig*, immunoglobulin.

oxide dismutase, heme oxygenase, and nitric oxide synthase 3 (Fig 4, online only). The results of microarray analysis were confirmed by quantitative PCR for iNOS and rapamycin-binding protein (data not shown).

DISCUSSION

The pathophysiology of human AAA formation is complex and involves multiple factors, such as biomechanical wall stress, inflammation, proteolytic degradation, and genetics.[2,17] Effective medical therapy to slow the growth of aortic aneurysmal disease would be of tremendous benefit to many patients with AAAs. The most important finding of this study is that simvastatin reduced experimental aneurysm size. Statins have revolutionized the management of atherosclerosis. Data from many large, randomized, multicenter clinical trials have now established a clear role for statins in both primary and secondary prevention of coronary artery disease. The pleiotropic effects of statins, namely, the non–lipid-lowering effects of statin therapy, have been increasingly recognized in recent years.

The National Cholesterol Education Program, with the endorsement of the American Heart Association, has determined that AAA harbors a coronary heart disease risk similar to that of peripheral arterial disease and carotid artery disease.[18] The recommendation is to initiate drug therapy in these patients to achieve target low-density lipoprotein levels in order to reduce their risk of coronary heart disease. As a consequence of this recommendation by the American Heart Association, many AAA patients will be placed on statin therapy. Our findings suggest that statin treatment of AAA patients could have the added benefit of reducing their rate of aneurysm expansion.

The pathophysiology of aneurysm formation in the rat elastase model is multifactorial. Aneurysm formation is not dependent on the initial infusion of elastase activity, but rather on the subsequent inflammatory response and matrix remodeling caused by products released by macrophages and other inflammatory cells.[13] The animal model has also been used to identify therapeutic interventions that might suppress aneurysm formation. Thus, our laboratory has shown that inhibitors of MMP activity,[7] inhibitors of iNOS activity,[1] and the immunosuppressor drug rapamycin[5] suppress expansion of experimental aneurysms.

In this study, simvastatin suppressed aneurysm expansion compared with controls. Simvastatin had no effect on inflammatory cell infiltration into the tissue, yet biochemi-

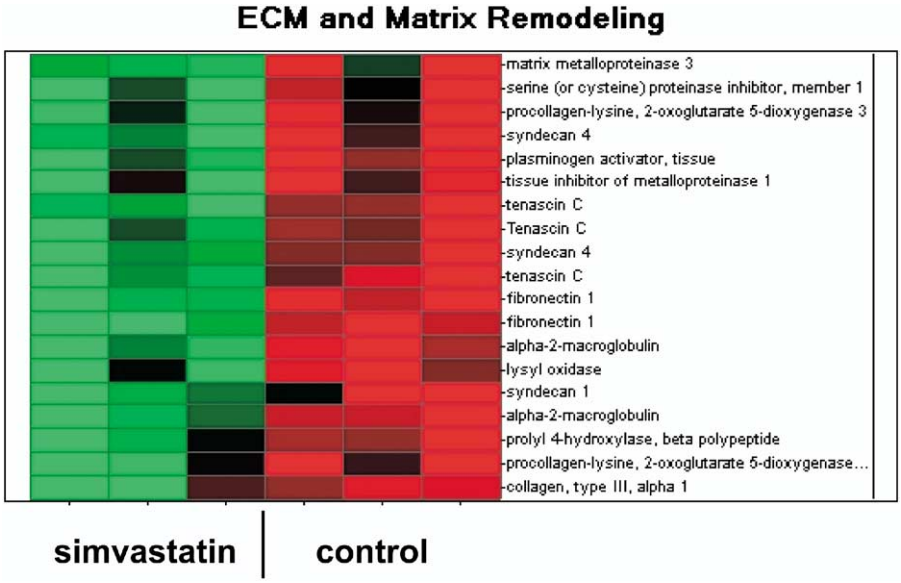

Fig 6. Microarray data for genes related to extracellular matrix *(ECM)* synthesis and remodeling. Gene expression levels are reflected in the heat map colors. *Red* indicates increased expression; *green* indicates decreased expression. Each column represents a single aortic sample. All genes listed showed a significant decrease in expression in simvastatin-treated animals ($P < .05$). Note that some genes are represented by multiple probes.

cal analyses revealed that levels of MMP-9 and NF-κB were decreased. This suggests that statins mediate their effects, at least partially, by blocking inflammatory signaling cascades. This is consistent with other studies that have shown the anti-inflammatory activity of statins.[8-11] Nagashima et al[11]showed that treatment with cerivastatin suppressed MMP-9 production by neutrophils and macrophages in AAA tissues but did not affect the extent of inflammation, and these findings are consistent with the findings in this study. In our previous study with the immunosuppressor rapamycin, we did not find a quantitative difference in inflammatory cell infiltration, despite a significant reduction in aneurysm size. A recent report also demonstrated suppression of experimental aneurysm formation by simvastatin in mice. This effect was independent of the lipid-lowering effects of the statin,[19] thus suggesting that the reduction in aneurysm size reported here was not caused by changes in serum lipid levels.

NF-κB is a nuclear transcription factor thought to be one of the primary modulators of inflammatory signaling.[20] In our experiment, NF-κB steady-state levels were decreased in simvastatin-treated AAA tissue by immunoblot analysis. NF-κB is induced by various cytokines, particularly interleukin 1β and tumor necrosis factor α. NF-κB can stimulate the production of multiple proinflammatory compounds, including iNOS and interleukin 1. Nakashima et al[21] have shown that NF-κB suppression reduces experimental aneurysm expansion. Inhibition of NF-κB has been associated with decreased production of MMP-9 in vascular smooth muscle cells.[22] This is consistent with our finding that MMP-9 levels were decreased in simvastatin-treated rats.

Inflammation plays a key role in the pathogenesis of aneurysms.[3,13,21] Previous studies have shown increased expression of genes related to inflammation, such as cytokines, cyclooxygenase 2, and iNOS, in AAAs.[16,23,24] The gene expression profiling data reported here support the biochemical and histologic analyses and strongly suggest that simvastatin suppresses aneurysm expansion by modulating inflammatory signaling pathways. Several proinflammatory gene products were downregulated by simvastatin, including cytokines, chemokines and their receptors, and leukocyte adhesion molecules. Other inflammation-related genes that were significantly decreased in the statin group included gene products involved in acute phase reactions, mediators of inflammatory pathway signaling, and substances that enhance monocyte/macrophage and neutrophil chemotaxis and activation.[25-35]

Expansion of aneurysms is directly related to remodeling of the ECM, mediated in part by active proteolysis.[36] Expression of members of the MMP family of secreted proteases, which are produced by macrophages, is upregulated in aneurysm formation.[16,23] In this study, we demonstrated that simvastatin treatment caused downregulation of MMP-9 and MMP-3 expression. Tissue plasminogen activator and plasminogen activator inhibitor 1 were also downregulated. Several genes related to ECM biosynthesis were also downregulated, including fibronectin, collagen type III α1, and collagen-processing enzymes.

Oxidative stress has been suggested to contribute to the tissue damage associated with aneurysm expansion. Inducible NOS expression is induced during aneurysm formation in the animal model[37-39] and in human disease.[40] Nitric oxide, the product of iNOS, can mediate oxidative degra-

dation of the ECM in regions of high oxidant stress. Inhibition of iNOS activity limits experimental aneurysmal expansion.[39] iNOS expression was downregulated by simvastatin treatment (Fig 5). This downregulation is likely to be beneficial and to contribute to suppressing aneurysm expansion. Simvastatin also caused downregulation of other oxidative gene products, including heme oxygenase, which releases carbon monoxide during heme metabolism and has been suggested to contribute to aneurysm formation by oxidative tissue injury.[16] Other potentially important oxidative stress–related genes that were downregulated by the statin were thioredoxin reductase 1 and superoxide dismutase.

CONCLUSION

Simvastatin significantly suppresses experimental aneurysm expansion and reduces protein levels of MMP-9 and NF-κB. Gene array analysis provides evidence that several mediators of inflammation, matrix remodeling, and oxidative stress are downregulated by simvastatin treatment. This suggests that simvastatin inhibits AAA formation by blocking the expression of certain proinflammatory and oxidative stress genes. Simvastatin may be useful as an adjuvant therapy to suppress the growth of small aneurysms.

AUTHOR CONTRIBUTIONS

Conception and design: AK, JRE, JRM, DJC
Analysis and interpretation: AK, JRE, JRM, AG, DPF, SWG, EMAZ, DJC
Data collection: AK, JRE, JRM, AG
Writing the article: AK, JRE, JRM, DJC
Critical revision of the article: AK, JRE, JRM, AG, DPF, SWG, EMAZ, DJC
Final approval of the article: AK, JRE, JRM, AG, DPF, SWG, EMAZ, DJC
Statistical analysis: AK, JRE, JRM, AG, DJC
Overall responsibility: JRE

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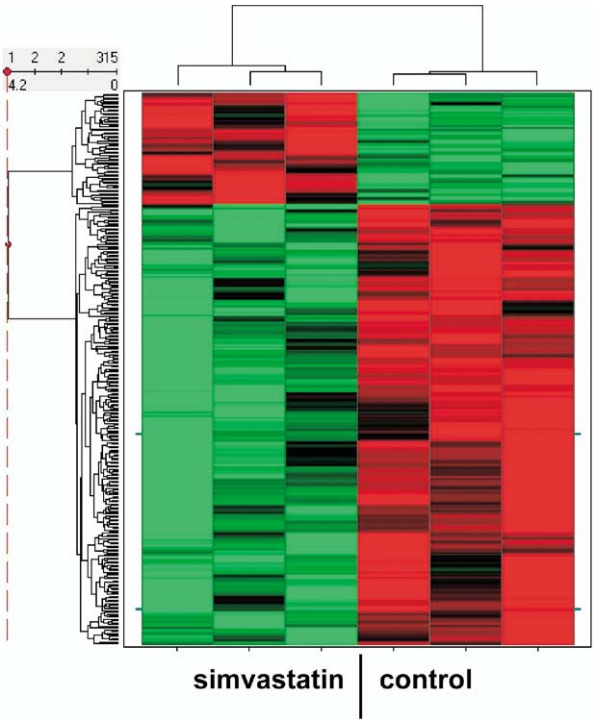

Fig 3. online only. Cluster analysis of genes with statistically significant differences in expression. Gene expression levels are reflected in the heat map colors. *Red* indicates increased expression; *green* indicates decreased expression. Each column represents a single aortic sample. All genes listed showed a significant difference in expression in simvastatin-treated animals ($P < .05$).

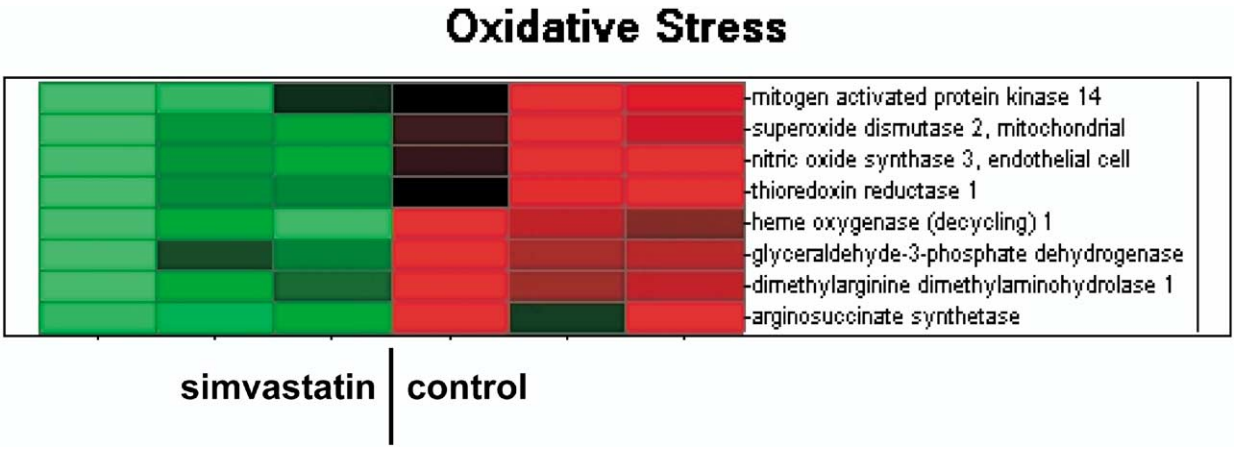

Fig 4. online only. Microarray data for genes related to oxidative stress. Gene expression levels are reflected in the heat map colors. *Red* indicates increased expression; *green* indicates decreased expression. Each column represents a single aortic sample. All genes listed showed a significant decrease in expression in simvastatin-treated animals ($P < .05$).

Table 1a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
X66370_at	3920.7	P	4098.6	P	5010	P	3612.3	P	3637.1	P	3721.6	P
rc_H31588_at	39.9	P	50.1	P	45.5	A	17.6	A	22.6	A	28.3	P
M13011cds_at	117.6	P	138	P	147	A	84.9	P	101.4	P	99.1	P
X76453_at	82.5	P	102.5	P	116.8	P	20.8	P	29.4	P	50.1	P
X60328_g_at	35.6	P	38.9	P	48.5	A	13.5	A	20.7	A	21.3	A
AB011365_s_at	48.9	P	66.5	P	84.8	P	16.1	M	31.3	P	37.9	P
rc_AA894264_at	77	P	81.9	P	103.3	M	42.6	A	56.1	A	67.5	P
X14181cds_s_at	5694.1	P	6173	P	7332.3	P	4744	P	5060.5	P	5446.4	P
X56228_at	99.7	P	142.5	P	178.2	P	70.9	P	89.3	P	76	P
X70223_at	34.4	P	52.1	P	60	A	18.8	M	21.7	A	21.1	A
D17521_at	49.3	P	63.4	P	81.2	A	35.6	P	36.6	P	34.1	P
rc_AI070783_at	34.1	P	56.1	P	67.6	P	17.2	P	15.9	P	25.5	P
rc_AI170568_s_at	132.6	P	192.6	P	215.6	P	102.1	P	111.8	P	118.8	P
J02585_at	57.2	P	135.7	P	221.3	P	22.8	P	8.5	A	19.7	M
AF055286_at	8.1	P	13.1	P	22.8	A	2.5	A	3.9	A	5.7	A
rc_AA800202_at	24.5	P	31.6	P	43.9	P	16.3	P	18.9	P	20.1	P
D31838_at	30.4	P	34.9	P	48.2	A	21.1	M	23.4	M	23.2	P
M77694_at	64.9	P	80.4	P	147.6	P	37.2	P	38.9	P	45.2	P
rc_AA800243_at	63.7	P	74.4	P	143	P	33.3	P	37.5	P	34.3	P
D14014_g_at	145.4	P	159.4	P	214.6	P	120.9	P	114.4	P	131.5	P

Table 16a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
X66370 R.norvegicus mRNA for ribosomal protein S9 /cds=(26,610) /gb=X66370 /gi=57142 /ug=Rn.3381 /len=688	0.008306593	ribosomal protein S9
rc_H31588 EST105764 Rattus norvegicus cDNA, 3 end /clone=RPCAR49 /clone_end=3 /gb=H31588 /gi=977005 /ug=Rn.25545 /len=343	0.022329784	—
M13011cds RATRASH1C Rat c-ras-H-1 gene, complete cds	0.0385477	Similar to Transforming protein p21/H-Ras-1 (c-H-ras)
X76453 R.norvegicus (Sprague Dawley) H-rev107 mRNA /cds=(97,579) /gb=X76453 /gi=433962 /ug=Rn.11377 /len=966	0.004669983	HRAS like suppressor
X60328 R.norvegicus mRNA for cytosolic epoxide hydrolase /cds=(0,317) /gb=X60328 /gi=55929 /ug=Rn.11415 /len=637	0.002422969	epoxide hydrolase 2, cytoplasmic
AB011365 Rattus norvegicus mRNA for PPAR-gamma protein, complete cds	0.021881602	peroxisome proliferator activated receptor, gamma
rc_AA894264 EST198067 Rattus norvegicus cDNA, 3 end /clone=RSPAU21 /clone_end=3 /gb=AA894264 /gi=3021143 /ug=Rn.24883 /len=583	0.034542989	Similar to kIAA0367
X14181cds RRRPL18A Rat mRNA for ribosomal protein L18a	0.046100929	similar to 60S ribosomal protein L18a
X56228 Rat mRNA for rhodanese /cds=(0,887) /gb=X56228 /gi=57068 /ug=Rn.6360 /len=999	0.033061442	Thiosulfate sulfurtransferase
X70223 R. norvegicus mRNA for 22kDa integral peroxisomal membrane protein /cds=(17,601) /gb=X70223 /gi=297436 /ug=Rn.10292 /len=852	0.010022217	peroxisomal membrane protein 2
D17521 RATCLC3 Rat mRNA for protein kinase C-regulated chloride channel, complete cds	0.007878614	Chloride channel 3
rc_AI070783 UI-R-C2-mr-c-08-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-C2-mr-c-08-0-UI /clone_end=3 /gb=AI070783 /ug=Rn.19847 /len=419	0.018808519	rabin 3
rc_AI170568 EST216501 Rattus norvegicus cDNA, 3 end /clone=RMUAY05 /clone_end=3 /gb=AI170568 /gi=3710608 /ug=Rn.4005 /len=670	0.040584079	dodecenoyl-coenzyme A delta isomerase
J02585 Rat liver stearyl-CoA desaturase mRNA, complete cds /cds=(102,1178) /gb=J02585 /gi=206859 /ug=Rn.10982 /len=4689	0.038050208	stearoyl-Coenzyme A desaturase 1
AF055286 Rattus norvegicus potential-sensitive polyspecific organic cation transporter OCT3 (OCT3) mRNA, complete cds	0.039697302	solute carrier family 22, member 3
rc_AA800202 EST189699 Rattus norvegicus cDNA, 3 end /clone=RHEAM39 /clone_end=3 /gb=AA800202 /gi=2863157 /ug=Rn.6943 /len=543	0.021452925	—
D31838 RATWEE1 Rat mRNA for wee1 tyrosine kinase, complete cds	0.007175213	—
M77694 R.norvegicus fumarylacetoacetate hydrolase (FAH) mRNA, complete cds /cds=(22,1281) /gb=M77694 /gi=204089 /ug=Rn.9195 /len=1373	0.039701547	fumarylacetoacetate hydrolase
rc_AA800243 EST189740 Rattus norvegicus cDNA, 3 end /clone=RHEAM86 /clone_end=3 /gb=AA800243 /gi=2863198 /ug=Rn.8171 /len=613	0.032262363	Similar to cell death activator CIDE-A
D14014 RATCYCLD1 Rat mRNA for cyclin D1, complete cds	0.012502237	cyclin D1

Table 2a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
U70211_at	106.1	P	139.3	P	177.7	P	64.3	A	101.9	A	76.9	P
X14210cds_g_at	5963.6	P	6519.7	P	7441.1	P	4949.6	P	3531.9	P	5122.9	P
rc_AI232374_g_at	355.6	P	355.4	P	427.8	P	225.6	P	207.1	P	228.1	P
rc_AA891737_at	49.1	P	55.6	P	60.8	P	29.6	P	22.5	P	25.5	P
S65091_g_at	11.9	P	15.7	P	17.4	A	3.4	A	1	A	5.4	A
AF055286_g_at	40.7	P	51.4	P	48.3	A	7.3	A	4	A	13.3	A
U16686_at	35.7	P	45.7	P	36.9	A	10	A	4.1	A	14.1	A
rc_AA799537_at	67.8	P	78.9	P	92.9	A	58.4	P	47.4	A	52	P
rc_AA818888_at	4742.7	P	5219.3	P	6452.1	P	4609.1	P	4181.3	P	4065.7	P
M24105_at	163.2	P	221.5	P	206.4	P	131.1	P	127.8	P	123.1	P
X97772_g_at	95.1	P	175.2	P	134.8	P	54.7	P	50.2	P	54.5	P
rc_AA799560_at	201.8	P	314.3	P	273.8	P	112.3	P	125.1	P	142	P
U17013_at	44.2	P	57.9	P	61.3	P	37.1	P	38.2	P	35.1	P
J04591_at	18.9	P	22.5	P	25.2	A	14.7	P	15.8	A	14	P
rc_AA942685_at	557	P	893.4	P	422.2	P	73.3	P	54	P	178.4	P
rc_AI045440_at	79	P	105.9	M	75.9	A	49.4	P	24.6	A	37.7	P
rc_AA799410_g_at	57.4	P	54.5	P	84.2	A	45.2	P	39.1	A	31.1	A
rc_AA800678_g_at	520.7	P	501.7	P	700	P	451.2	P	407.9	P	354.3	P
rc_AI639199_at	41.3	P	38.8	P	62.7	A	28.2	P	31	P	26.3	P
rc_AA875633_at	825.9	P	915.8	P	1361.6	P	697.6	P	711.3	P	541.2	P

Table 17a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
U70211 Rattus norvegicus RNB6 mRNA, complete cds /cds=(218,1399) /gb=U70211 /gi=2058461 /ug=Rn.9790 /len=1838	0.046816462	RNB6
X14210cds RNRPS4 Rat mRNA for ribosomal protein S4	0.04531494	Ribosomal protein S4, X-linked
rc_AI232374 EST229062 Rattus norvegicus cDNA, 3 end /clone=RKICA88 /clone_end=3 /gb=AI232374 / ug=Rn.3129 /len=609	0.000133257	H1 histone family, member 0
rc_AA891737 EST195540 Rattus norvegicus cDNA, 3 end /clone=RKIAG17 /clone_end=3 /gb=AA891737 / gi=3018616 /ug=Rn.3650 /len=558	0.00109138	—
S65091 cyclic AMP-regulated phosphoprotein [rats, mRNA, 1030 nt]	0.003071975	Similar to protein phosphatase 1, regulatory (inhibitory) subunit 1C; thymocyte ARPP
AF055286 Rattus norvegicus potential-sensitive polyspecific organic cation transporter OCT3 (OCT3) mRNA, complete cds	0.001788858	solute carrier family 22, member 3
U16686 Rattus norvegicus defensin RatNP-1 precursor mRNA, complete cds /cds=(76,360) /gb=U16686 /gi=1041810 /ug=Rn.10223 /len=485	0.007862358	defensin, alpha 5, Paneth cell-specific
rc_AA799537 EST189034 Rattus norvegicus cDNA, 3 end /clone=RHEAC28 /clone_end=3 /gb=AA799537 /gi=2862492 /ug=Rn.3798 /len=577	0.008261648	—
rc_AA818888 UI-R-A0-av-c-08-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A0-av-c-08-0-UI /clone_end=3 /gb=AA818888 /gi=2888474 /ug=Rn.4300 /len=504	0.031751045	ubiquitin A-52 residue ribosomal protein fusion product 1
M24105 Rat vesicle associated membrane protein (VAMP-2) mRNA, complete cds /cds=(20,370) /gb=M24105 /gi=207626 /ug=Rn.11289 /len=2071	0.04970358	vesicle-associated membrane protein 2
X97772 R.norvegicus mRNA for D-3-phosphoglycerate dehydrogenase /cds=(0,1601) /gb=X97772 /gi=1944613 /ug=Rn.6872 /len=1602	0.043116984	3-phosphoglycerate dehydrogenase
rc_AA799560 EST189057 Rattus norvegicus cDNA, 3 end /clone=RHEAC55 /clone_end=3 /gb=AA799560 /gi=2862515 /ug=Rn.3407 /len=604	0.030926479	N-myc downstream-regulated gene 2
U17013 Rattus norvegicus transcription factor Oct1 (Oct1) mRNA, partial cds /cds=(0,1898) /gb=U17013 /gi=575454 /ug=Rn.9992 /len=2157	0.033877806	POU domain, class 2, transcription factor 1
J04591 Rat dipeptidyl peptidase IV (DPP) mRNA, complete cds /cds=(88,2391) /gb=J04591 /gi=203973 /ug=Rn.1862 /len=4835	0.010506465	dipeptidylpeptidase 4
rc_AA942685 EST198184 Rattus norvegicus cDNA, 3 end /clone=RBRAA17 /clone_end=3 /gb=AA942685 /gi=3102601 /ug=Rn.2589 /len=620	0.04103323	cytosolic cysteine dioxygenase 1
rc_AI045440 UI-R-C1-jz-a-12-0-UI.s2 Rattus norvegicus cDNA, 3 end /clone=UI-R-C1-jz-a-12-0-UI /clone_end=3 /gb=AI045440 /ug=Rn.11144 /len=396	0.042847524	sialophorin
rc_AA799410 EST188907 Rattus norvegicus cDNA, 3 end /clone=RHEAA81 /clone_end=3 /gb=AA799410 /gi=2862365 /ug=Rn.3326 /len=612	0.022254771	—
rc_AA800678 EST190175 Rattus norvegicus cDNA, 3 end /clone=RLUAK20 /clone_end=3 /gb=AA800678 /gi=2863633 /ug=Rn.8592 /len=452	0.028133991	—
Rat mixed-tissue library Rattus norvegicus cDNA clone rx02840 3 , mRNA sequence [Rattus norvegicus]	0.017953937	—
rc_AA875633 UI-R-E0-ct-f-03-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-ct-f-03-0-UI /clone_end=3 /gb=AA875633 /gi=2980581 /ug=Rn.2983 /len=415	0.040567688	—

Table 3a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
rc_H33486_at	38.9	P	44.4	P	62.5	A	33	P	22.4	A	32.3	P
AFFX-BioB-3_at	135.2	P	128.7	P	225.6	P	101.4	P	60.4	P	81.2	P
X57405_g_at	198.4	P	201.2	P	296	P	175	P	155.1	P	169.9	P
AFFX-BioC-5_at	489.6	P	413.9	P	847.7	P	290.1	P	225.7	P	246.6	P
rc_AA800593_at	60.6	P	49.3	P	97.7	P	30.5	P	26	P	37.3	P
rc_AI639001_at	89.3	P	75.6	P	123.6	P	62.7	P	53.8	P	67	P
rc_AI233749_at	965.9	P	851.3	P	1327.5	P	551.9	P	489.9	P	669	P
U72620_at	146.4	P	134.6	P	142.4	P	64.2	P	102	P	67	P
X95096_at	30.3	P	32.3	P	26.3	A	7.6	A	12.2	A	6	A
rc_AI176488_at	225.7	P	175.2	P	207	P	84.2	P	85.2	P	109.9	P
rc_AA800712_g_at	133.1	P	126.1	P	114.2	P	44.2	P	39.3	P	63.9	P
rc_AI105137_s_at	52.8	P	49.6	P	56.7	A	34.3	P	35.1	A	41.8	P
S81289_i_at	62.2	P	44.8	P	22.9	A	0.2	A	2.1	A	5.2	M
M83143_at	289.1	P	253.6	P	246.5	P	162	P	157.3	P	163.9	P
rc_AA874873_g_at	161.1	P	132.5	P	135	P	66.9	P	71.7	P	84	P
rc_AI233261_i_at	67.4	P	54.3	P	57.3	P	40.4	P	29.8	P	31.5	P
AFFX-BioB-M_at	447.5	P	399.2	P	450.6	P	293.6	P	142.5	P	205.1	P

Table 18a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
rc_H33486 EST109536 Rattus norvegicus cDNA, 3 end /clone=RPNAS60 /clone_end=3 /gb=H33486 /gi=978903 /ug=Rn.23316 /len=395	0.030162982	Similar to hypothetical protein MGC28622
E. coli /GEN=bioB /DB_XREF=gb:J04423.1 /NOTE=SIF corresponding to nucleotides 2755-3052 of gb:J04423.1 /DEF=E.coli 7,8-diamino-pelargonic acid (bioA), biotin synthetase (bioB), 7-keto-8-amino-pelargonic acid synthetase (bioF), bioC protein, and dethiobiotin synthetase (bioD), complete cds.	0.028604608	—
X57405 RRNOTCH R.rattus mRNA homologue of Drosophila notch protein	0.028082155	Notch gene homolog 1, (Drosophila)
E. coli /GEN=bioC /DB_XREF=gb:J04423.1 /NOTE=SIF corresponding to nucleotides 4218-4566 of gb:J04423.1 /DEF=E.coli 7,8-diamino-pelargonic acid (bioA), biotin synthetase (bioB), 7-keto-8-amino-pelargonic acid synthetase (bioF), bioC protein, and dethiobiotin synthetase (bioD), complete cds.	0.027315447	—
rc_AA800593 EST190090 Rattus norvegicus cDNA, 3 end /clone=RLUAB58 /clone_end=3 /gb=AA800593 /gi=2863548 /ug=Rn.4072 /len=527	0.02526972	—
Rat mixed-tissue library Rattus norvegicus cDNA clone rx02427 3 , mRNA sequence [Rattus norvegicus]	0.029626899	—
rc_AI233749 EST230437 Rattus norvegicus cDNA, 3 end /clone=RKIDJ59 /clone_end=3 /gb=AI233749 / ug=Rn.5971 /len=462	0.008849427	ribosomal protein L30
U72620 Rattus norvegicus Lot1 mRNA, complete cds / cds=(547,2298) /gb=U72620 /gi=1621624 /ug=Rn.6977 /len=4938	0.038078246	pleiomorphic adenoma gene-like 1
X95096 R.norvegicus mRNA for macrophage stimulating protein /cds=(12,2162) /gb=X95096 /gi=1669718 /ug=Rn.10613 /len=2222	0.009694688	Macrophage stimulating 1 (hepatocyte growth factor-like)
rc_AI176488 EST220073 Rattus norvegicus cDNA, 3 end /clone=ROVBS47 /clone_end=3 /gb=AI176488 / ug=Rn.9909 /len=650	0.013395196	nuclear factor I/B
rc_AA800712 EST190209 Rattus norvegicus cDNA, 3 end /clone=RLUAK56 /clone_end=3 /gb=AA800712 /gi=2863667 /ug=Rn.13142 /len=535	0.012983754	—
rc_AI105137 EST214426 Rattus norvegicus cDNA, 3 end /clone=RKIBG10 /clone_end=3 /gb=AI105137 / gi=3709294 /ug=Rn.3847 /len=622	0.032264927	glutathione S-transferase, mitochondrial
S81289 IgM kappa chain variable region {CDR1 to CDR3 region} [rats, LEW, HAR-1 hybridoma cells, mRNA Partial, 408 nt]	0.040462792	—
M83143 Rat beta-galactoside-alpha 2,6-sialyltransferase mRNA /cds=(104,748) /gb=M83143 /gi=203146 /ug=Rn.1409 /len=3224	0.047609031	sialyltransferase 1
rc_AA874873 UI-R-E0-ci-d-11-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-ci-d-11-0-UI /clone_end=3 /gb=AA874873 /gi=2979821 /ug=Rn.3156 /len=568	0.028955687	—
rc_AI233261 EST229949 Rattus norvegicus cDNA, 3 end /clone=RKIDC84 /clone_end=3 /gb=AI233261 / ug=Rn.2460 /len=629	0.048432976	glutamate cysteine ligase, modifier subunit
E. coli /GEN=bioB /DB_XREF=gb:J04423.1 /NOTE=SIF corresponding to nucleotides 2482-2739 of gb:J04423.1 /DEF=E.coli 7,8-diamino-pelargonic acid (bioA), biotin synthetase (bioB), 7-keto-8-amino-pelargonic acid synthetase (bioF), bioC protein, and dethiobiotin synthetase (bioD), complete cds.	0.024919154	—

Table 4a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
rc_AA799501_at	3199.6	P	2836.5	P	3643.7	P	2477	P	2374.1	P	2378.8	P
rc_H33461_at	104.6	A	72.1	P	108	P	46.4	P	53.7	P	57.3	P
X55153mRNA_s_at	4398.3	P	4104.1	P	5641.9	P	3342.5	P	3287.5	P	3262.3	P
M27905_at	2104.6	P	1697.7	P	2587.6	P	1625.6	P	1263.7	P	1201.7	P
rc_AI179027_at	97.2	P	91.7	P	120.8	A	86.3	P	78.9	A	83.3	A
AF009133_at	20.6	P	15.3	P	26.6	A	4.9	A	13	P	11.2	P
rc_AI176689_at	67.5	P	55.7	P	79.1	M	15.5	A	38.3	A	41.4	P
AB010119_at	99.9	P	103.6	P	179.2	P	190.7	P	161.2	P	187.4	P
L35767_at	39.7	P	37.2	P	60.4	A	53.2	P	49.3	M	51.3	P
rc_AI230778_at	347.5	P	299.3	P	451.8	P	393.2	P	389.3	P	399.6	P
AF090867_at	15.7	P	26.8	P	23.7	A	33.9	P	30.4	P	26.9	P
M64300_at	37.8	P	55.1	P	52.8	A	62.5	P	58.7	P	55.3	P
rc_AA875506_at	51.5	P	57.7	P	65.1	P	78.2	P	66.8	P	73.2	P
D10854_at	2118	P	2264.5	P	2893.1	P	2586	P	2398.1	P	2444.2	P
rc_AA799323_at	130.7	P	152	P	194.8	P	212.8	P	194.7	P	200.4	P
rc_AA818487_s_at	1792.1	P	1966.9	P	2501.3	P	2203.7	P	2201.2	P	2124.7	P
L13039_s_at	1621.6	P	2168.6	P	2979.4	P	2815.7	P	2852.2	P	2487.3	P
E03424cds_s_at	24	P	33	P	43.3	A	46.1	P	45.1	P	38.3	P
U23769_at	557.8	P	593.5	P	868	P	868.1	P	830.3	P	768.8	P
rc_AA893235_at	86.7	P	85.1	P	125	P	149	P	142.3	P	121.4	P
M18330_at	116.6	P	153	P	171	P	186.4	P	187.8	P	187.5	P
D89070cds_s_at	101.7	P	186.3	P	187.6	P	210.3	P	206.2	P	227.2	P

Table 19a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
rc_AA799501 EST188998 Rattus norvegicus cDNA, 3 end /clone=RHEAB79 /clone_end=3 /gb=AA799501 /gi=2862456 /ug=Rn.90 /len=777	0.022214424	Ribosomal protein S4, X-linked
rc_H33461 EST109481 Rattus norvegicus cDNA, 3 end /clone=RPNAS13 /clone_end=3 /gb=H33461 /gi=978878 /ug=Rn.4252 /len=551	0.033738296	oxidation resistance 1
X55153mRNA RRRP2G R.rattus RP2 gene for ribosomal protein P2	0.00207503	Similar to 60S ACIDIC RIBOSOMAL PROTEIN P2
M27905 Rattus norvegicus ribosomal protein L21 mRNA, complete cds /cds=(39,521) /gb=M27905 /gi=205118 /ug=Rn.2554 /len=554	0.043385108	ribosomal protein L21
rc_AI179027 EST222709 Rattus norvegicus cDNA, 3 end /clone=RSPCA64 /clone_end=3 /gb=AI179027 / ug=Rn.119 /len=545	0.022717461	—
AF009133 Rattus norvegicus CD94 (Cd94) mRNA, complete cds /cds=(262,801) /gb=AF009133 /gi=2267160 /ug=Rn.6025 /len=1099	0.048083327	killer cell lectin-like receptor, subfamily D, member 1
rc_AI176689 EST220282 Rattus norvegicus cDNA, 3 end /clone=ROVBV56 /clone_end=3 /gb=AI176689 / ug=Rn.17256 /len=597	0.033767425	mitogen-activated protein kinase kinase 6
AB010119 Rattus norvegicus mRNA for Tctex-1, complete cds	0.010994893	t-complex testis expressed 1
L35767 Rat very low density lipoprotein receptor (VLDLR) mRNA, complete cds /cds=(183,2804) / gb=L35767 /gi=532225 /ug=Rn.9975 /len=2952	0.028322165	very low density lipoprotein receptor
rc_AI230778 EST227473 Rattus norvegicus cDNA, 3 end /clone=REMDB16 /clone_end=3 /gb=AI230778 /ug=Rn.3659 /len=560	0.023430541	Similar to tyrosylprotein sulfotransferase-2; TPST-2
AF090867 Rattus norvegicus guanosine monophosphate reductase mRNA, complete cds	0.046911705	guanosine monophosphate reductase
M64300 Rat extracellular signal-related kinase (ERK2) mRNA, complete cds /cds=(171,1247) /gb=M64300 /gi=204055 /ug=Rn.13651 /len=1467	0.045919682	mitogen activated protein kinase 1
rc_AA875506 UI-R-E0-ct-c-05-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-ct-c-05-0-UI /clone_end=3 /gb=AA875506 /gi=2980454 /ug=Rn.22771 /len=513	0.003566628	—
D10854 Rat mRNA for aldehyde reductase, complete cds /cds=(53,1030) /gb=D10854 /gi=399659 /ug=Rn.835 /len=1124	0.006603762	aldo-keto reductase family 1, member A1
rc_AA799323 EST188820 Rattus norvegicus cDNA, 3 end /clone=RHEAA31 /clone_end=3 /gb=AA799323 /gi=2862278 /ug=Rn.6178 /len=328	0.001401181	—
rc_AA818487 UI-R-A0-at-d-09-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A0-at-d-09-0-UI /clone_end=3 /gb=AA818487 /gi=2889226 /ug=Rn.1893 /len=527	0.006367472	cyclophilin B
L13039 RATANXIIA Rat annexin II mRNA, complete cds	0.040113004	annexin A2
E03424cds DNA encoding GTP cyclohydrolase I	0.026391043	GTP cyclohydrolase 1
U23769 Rattus norvegicus CLP36 (clp36) mRNA, complete cds /cds=(66,1049) /gb=U23769 /gi=1020150 /ug=Rn.11170 /len=1392	0.008417395	PDZ and LIM domain 1
rc_AA893235 EST197038 Rattus norvegicus cDNA, 3 end /clone=RKIBD88 /clone_end=3 /gb=AA893235 / gi=3020114 /ug=Rn.1040 /len=645	0.0066072	Similar to G0S2-like protein
M18330 RATPKCDA Rat protein kinase C delta subspecies	0.004301365	protein kinase C, delta
D89070cds Rattus norvegicus DNA for non-inducible carbony reductase, complete cds	0.036603594	carbonyl reductase 1

Table 5a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
S50461_s_at	16.7	P	41.9	P	41	A	48.9	P	53.4	P	61.2	P
D28773_s_at	42.3	P	56.3	P	67.3	P	64	P	65.6	P	69.3	P
U94330_at	57.1	P	103.4	P	120.7	P	157.6	P	126.9	P	137.7	P
AA848268_at	21.1	A	35.3	P	46.1	A	48.5	P	42.8	P	48.7	P
U50185_g_at	54.9	P	68.5	P	86.2	P	83.9	P	74.5	P	85.7	P
S76779_s_at	5014.2	P	6903	P	9286.2	P	8413.8	P	8262.9	P	8350.3	P
rc_AA859806_at	376.5	P	427.3	P	529.8	P	448.8	P	440.5	P	448.7	P
rc_AA892562_g_at	144.4	P	131.3	P	180.9	P	154.3	P	155.1	P	179.6	P
rc_AI176595_s_at	1518.5	P	1307.9	P	1724.9	P	1703.5	P	1538.4	P	1923.4	P
rc_AI639343_at	14.5	P	8.8	P	10.8	A	22.7	A	18.5	A	28.9	P
Z22812_at	179.8	P	122.7	P	257.7	P	332.4	P	241	P	446.4	P
AF022081_at	85.7	P	84.2	P	55.4	A	114.1	P	123.3	P	179.5	P
X76988cds_at	27.5	P	30.7	P	28.3	A	41.2	P	49.9	P	61.2	P
Y00497_s_at	198.5	P	196.9	P	177.6	P	250	P	285.2	P	338.9	P
rc_AI236284_s_at	73.9	P	66.8	P	68.6	A	95.4	P	105.7	P	122.7	P
X99337cds_s_at	113.5	P	79	P	81	A	128.2	P	158.6	P	213.3	P
rc_AI231164_s_at	166.8	P	95.1	P	91.3	P	269.3	P	285.4	P	419.2	P
L11319_at	164	P	128.8	P	148.4	P	178.4	P	179.4	P	224.3	P
Y09507_at	154.9	P	70.9	P	64.7	P	165.3	P	293.4	P	338.9	P
E13732cds_at	85.6	P	81.7	P	106.2	P	130.6	P	194.7	P	257.3	P
AF084205_at	44.8	P	47.1	M	57.4	A	58.2	P	76.4	P	96.4	P
M62388_at	180.7	P	216.4	P	253.1	P	229.4	P	257.7	P	307.2	P
rc_AI639387_at	140.8	P	137.5	P	198.7	P	168.2	P	171.9	P	184.7	P

Table 20a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
S50461 G alpha 12z,=signal-transducing G protein alpha 12 subunit [rats, brain, mRNA Partial, 466 nt]	0.033157591	guanine nucleotide binding protein, alpha 12
D28773 RATTXS Rat mRNA for thromboxane synthase, complete cds	0.014494845	thromboxane A synthase 1
U94330 Rattus norvegicus osteoprotegerin (OPG) mRNA, complete cds /cds=(123,1328) /gb=U94330 /gi=2072180 /ug=Rn.9792 /len=2432	0.02160626	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)
AA848268 EST191028 Normalized rat heart, Bento Soares Rattus sp. cDNA clone RHEAC66 5 end similar to DnaJ protein homolog 2, mRNA sequence [Rattus sp.]	0.028262002	Similar to mmDj4
U50185 RNU50185 Rattus norvegicus kidney protein phosphatase 1 myosin binding subunit mRNA, partial cds	0.017628872	protein phosphatase 1, regulatory (inhibitor) subunit 12A
S76779 rApoE=apolipoprotein E [rats, liver, mRNA Partial, 951 nt]	0.034431683	apolipoprotein E
rc_AA859806 UI-R-E0-bu-h-11-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-bu-h-11-0-UI /clone_end=3 /gb=AA859806 /gi=2949326 /ug=Rn.771 /len=460	0.018541265	—
rc_AA892562 EST196365 Rattus norvegicus cDNA, 3 end /clone=RKIAS90 /clone_end=3 /gb=AA892562 /gi=3019441 /ug=Rn.4223 /len=539	0.042703228	dyskeratosis congenita 1, dyskerin
rc_AI176595 EST220183 Rattus norvegicus cDNA, 3 end /clone=ROVBU30 /clone_end=3 /gb=AI176595 /ug=Rn.1294 /len=632	0.044872357	cathepsin L
Rat mixed-tissue library Rattus norvegicus cDNA clone rx04036 3 , mRNA sequence [Rattus norvegicus]	0.020799915	—
Z22812 R.norvegicus interleukin-1 receptor type 2 /cds=(123,1373) /gb=Z22812 /gi=311407 /ug=Rn.10758 /len=1380	0.048523162	interleukin 1 receptor, type II
AF022081 Rattus norvegicus small nuclear RING finger protein mRNA, complete cds	0.045214246	ring finger protein 4
X76988cds RNGALNACS R.norvegicus mRNA for gal beta 1,3 galNAc alpha 2,3-sialyltransferase	0.01655521	sialyltransferase 4B (beta-galactoside alpha-2,3-sialyltransferase)
Y00497 Rat mRNA for manganese-containing superoxide dismutase (MnSoD) /cds=(11,679) /gb=Y00497 /gi=56690 /ug=Rn.10488 /len=1438	0.021235168	superoxide dismutase 2, mitochondrial
rc_AI236284 EST232846 Rattus norvegicus cDNA, 3 end /clone=ROVDD66 /clone_end=3 /gb=AI236284 /ug=Rn.2366 /len=358	0.010541673	acyl-CoA synthetase long-chain family member 4
X99337cds RNGP55 R.norvegicus mRNA for glycoprotein 55	0.044433011	stromal cell derived factor receptor 1
rc_AI231164 EST227852 Rattus norvegicus cDNA, 3 end /clone=REMDG57 /clone_end=3 /gb=AI231164 /ug=Rn.8538 /len=491	0.016737384	splicing factor, arginine/serine-rich 10 (transformer 2 homolog, Drosophila)
L11319 Rat signal peptidase mRNA, complete cds /cds=(74,613) /gb=L11319 /gi=206977 /ug=Rn.24875 /len=643	0.042412648	signal peptidase complex 18kD
Y09507 R.norvegicus mRNA for hypoxia-inducible factor 1 /cds=(123,2600) /gb=Y09507 /gi=2924301 /ug=Rn.10852 /len=2711	0.04540702	hypoxia inducible factor 1, alpha subunit
E13732cds cDNA encoding rat CC chemokine receptor protein	0.036481013	macrophage inflammatory protein-1 alpha receptor gene
AF084205 Rattus norvegicus serine/threonine protein kinase TAO1 mRNA, complete cds	0.041806346	serine/threonine protein kinase TAO1
M62388 RATUCE Rattus norvegicus ubiquitin conjugating enzyme mRNA, complete cds	0.042233965	ubiquitin conjugating enzyme
Rat mixed-tissue library Rattus norvegicus cDNA clone rx05135 3 , mRNA sequence [Rattus norvegicus]	0.011344241	Similar to mitochondrial ribosomal protein S6

Table 6a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
M55017exon_s_at	45.2	P	41.8	P	55.9	A	52.8	P	67.5	P	69.8	P
AJ000557cds_s_at	26.9	P	24.6	P	37.3	A	49	P	65.7	P	73.7	P
rc_AI104500_at	90.8	P	86	P	101.3	M	124.1	P	159.3	P	158	P
rc_AA893022_at	319.4	P	321.5	P	450	P	428.7	P	475.7	P	467.2	P
rc_AI234060_s_at	879.2	P	383.4	P	141.9	P	1399	P	1106.3	P	1502	P
AF036537_g_at	257.4	P	175.6	P	165.1	P	338.8	P	284.5	P	322.3	P
rc_AA819793_at	81	P	74.1	P	86.9	P	84.3	P	82.3	P	88.9	P
M26594_at	44	P	30.1	P	27.2	A	52.1	P	49.6	P	54.9	P
rc_AI180288_s_at	220	P	146.5	P	93.1	P	280.8	P	267.7	P	307.6	P
M23566exon_s_at	398.1	P	357.2	P	406	P	522.6	P	476.5	P	543.2	P
M14656_at	2757.3	P	1892.4	P	1936.6	P	4289.5	P	3513.2	P	4561.4	P
M32062_g_at	747.7	P	513.9	P	581.9	P	930.8	P	1122.9	P	1032	P
U35890_at	117	P	56.4	P	54.7	A	138.1	P	187.3	P	178.5	P
D12770_s_at	1054.4	P	860.2	P	1084.1	P	1104	P	1172	P	1235.1	P
U36482_at	205.6	P	160.9	P	202.6	P	209.2	P	224.5	P	232	P
AB000778_s_at	140.1	P	88.5	P	136.5	P	160.4	P	165.8	P	168.1	P
X17053cds_s_at	633.1	P	203.6	P	337.6	P	706.9	P	786.7	P	801.6	P
E12625cds_at	56	P	52.7	P	64.9	A	85.2	P	67.8	P	84.4	P
U38253_at	48.5	P	51.3	P	57.7	A	66.8	P	56.2	P	69.7	P
L02121_at	55.2	P	57.1	P	67.2	A	80.2	P	66	P	83.4	P
AB003042_at	323.8	P	273.3	P	285.3	P	470.7	P	336.4	P	512	P
rc_AI639314_at	27.2	P	44.1	P	35.8	A	76.5	P	45.4	P	73.5	P

Table 21a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
M55017exon RATNUCIA2 Rat nucleolin gene	0.021446313	nucleolin
AJ000557cds RNJAK2 Rattus norvegicus mRNA for Janus protein tyrosine kinase 2, JAK2	0.008153048	Janus kinase 2
rc_AI104500 EST213789 Rattus norvegicus cDNA, 3 end /clone=RHECE29 /clone_end=3 /gb=AI104500 / gi=3708845 /ug=Rn.10657 /len=456	0.007264148	ectonucleoside triphosphate diphosphohydrolase 1
rc_AA893022 EST196825 Rattus norvegicus cDNA, 3 end /clone=RKIBB20 /clone_end=3 /gb=AA893022 / gi=3019901 /ug=Rn.4130 /len=379	0.002719969	Similar to RIKEN cDNA 3110050F08
rc_AI234060 EST230748 Rattus norvegicus cDNA, 3 end /clone=RLUCU63 /clone_end=3 /gb=AI234060 /ug=Rn.11372 /len=363	0.023608882	lysyl oxidase
AF036537 Rattus norvegicus homocysteine respondent protein HCYP2 mRNA, complete cds	0.03051962	receptor-interacting serine-threonine kinase 3
rc_AA819793 UI-R-A0-aq-f-03-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A0-aq-f-03-0-UI /clone_end=3 /gb=AA819793 /gi=2888980 /ug=Rn.16664 /len=522	0.042594288	Flap structure-specific endonuclease 1
M26594 Rat malic enzyme gene /cds=(0,1760) /gb=M26594 /gi=205293 /ug=Rn.22280 /len=1761	0.035370276	malic enzyme 1
rc_AI180288 EST224031 Rattus norvegicus cDNA, 3 end /clone=RSPCS84 /clone_end=3 /gb=AI180288 / ug=Rn.10621 /len=417	0.030957433	caldesmon 1
M23566exon RATA2MAC2 Rattus norvegicus alpha-2-macroglobulin gene, 3 end	0.00468355	alpha-2-macroglobulin
M14656 Rat osteopontin mRNA, complete cds /cds=(79,1032) /gb=M14656 /gi=205859 /ug=Rn.8871 /len=1457	0.010808436	secreted phosphoprotein 1
M32062 Rat Fc-gamma receptor mRNA, complete cds / cds=(49,852) /gb=M32062 /gi=204114 /ug=Rn.6050 /len=1341	0.013091606	Fc receptor, IgG, low affinity III
U35890 Rattus norvegicus polypeptide GalNAc transferase T1 mRNA, complete cds /cds=(102,1781) /gb=U35890 /gi=1141791 /ug=Rn.10266 /len=1838	0.024948762	polypeptide GalNAc transferase T1
D12770 RATANT1 Rat mRNA for mitochondrial adenine nucleotide translocator	0.028939972	solute carrier family 25 (mitochondrial adenine nucleotide translocator) member 4
U36482 Rattus norvegicus endoplasmic reticulum protein ERp29 precursor, mRNA, complete cds /cds=(43,825) /gb=U36482 /gi=2317799 /ug=Rn.11262 /len=1115	0.044902526	endoplasmic retuclum protein 29
AB000778 Rattus norvegicus mRNA for phospholipase D, complete cds /cds=(195,3419) /gb=AB000778 /gi=2828349 /ug=Rn.11130 /len=4945	0.024991954	phospholipase D1
X17053cds RATJE Rat immediate-early serum-responsive JE gene	0.042530329	chemokine (C-C motif) ligand 2
E12625cds cDNA encoding a rat novel protein which is expressed with nerve injury	0.007375029	sterol-C4-methyl oxidase-like
U38253 Rattus norvegicus initiation factor eIF-2B gamma subunit (eIF-2B gamma) mRNA, complete cds /cds=(88,1446) /gb=U38253 /gi=1537014 /ug=Rn.10577 /len=1470	0.013019815	eukaryotic translation initiation factor 2B, subunit 3 (gamma, 58kD)
L02121 Rattus norvegicus (clone nclk) cdc2-related protein kinase mRNA, complete cds /cds=(93,971) / gb=L02121 /gi=203389 /ug=Rn.10749 /len=1161	0.010026143	cyclin-dependent kinase 5
AB003042 Rattus norvegicus mRNA for C5a receptor, complete cds /cds=(43,1101) /gb=AB003042 /gi=2116555 /ug=Rn.10680 /len=1772	0.041934954	complement component 5, receptor 1
Rat mixed-tissue library Rattus norvegicus cDNA clone rx04757 3 , mRNA sequence [Rattus norvegicus]	0.038858844	Delangin

Table 7a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
rc_AA894089_s_at	46.2	P	71.6	P	57.9	P	109.4	P	74.3	P	115.8	P
U62897_at	189.9	P	244.4	P	204.8	P	335.6	P	265.6	P	395.4	P
J02962_at	1876.7	P	2612.7	P	2088	P	3150.6	P	2739.4	P	3469.2	P
M11942_s_at	2680.3	P	2893.6	P	3847.2	P	4385.9	P	3174.6	P	3911.4	P
M89945mRNA_at	221.6	P	197.7	P	160.4	A	297.7	P	254.3	P	270.1	P
M17701_s_at	2162.5	P	2081.9	P	1497	P	2971.1	P	2648.2	P	2660.4	P
rc_AI171506_g_at	121.2	P	95.7	P	80.8	P	161.2	P	147.1	P	151.4	P
rc_AA875470_at	146.9	P	205.3	P	73.4	P	251.1	P	275.6	P	265.3	P
X53949cds_at	45.8	P	47.5	P	7.8	A	85.2	P	81.4	P	75.4	P
rc_AA859496_at	60.1	P	63.4	P	31.8	A	86.4	P	79.8	P	82.4	P
rc_AA875127_at	63.7	P	76.8	P	40.6	A	99.4	P	94.2	P	98.8	P
X74565cds_at	84.6	P	106.4	P	21.3	A	143.2	P	141.6	P	146.5	P
rc_AI145502_s_at	85.5	P	99.6	P	23.1	A	143.2	P	132	P	142.3	P
AB020504_at	27.7	P	27.9	M	24	A	32.8	P	32.8	A	34.9	P
X56729mRNA_at	35.5	P	37.5	P	26.8	A	55.4	P	46.8	P	55.3	P
AF030378_at	35	P	41.7	P	26.7	A	55.2	P	47.9	P	57.2	P
X73371_at	351.1	P	336.4	P	253.7	P	499.2	P	432.1	P	556.1	P
X12535cds_at	152.9	P	245.4	P	94.9	P	280.4	P	297.5	P	371.6	P
rc_AA875127_g_at	80.6	P	112.9	P	61.1	A	132.2	P	125.7	P	150.1	P
AB017188_at	142.7	P	159.3	P	164.5	P	166.6	P	168.6	P	193.5	P
rc_AA925246_at	593.2	P	818.2	P	753	P	1300.3	P	959	P	942.5	P

Table 22a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
rc_AA894089 EST197892 Rattus norvegicus cDNA, 3 end /clone=RSPAQ63 /clone_end=3 /gb=AA894089 / gi=3020968 /ug=Rn.3736 /len=613	0.033576793	praja 2, RING-H2 motif containing
U62897 Rattus norvegicus carboxypeptidase D precursor (Cpd) mRNA, complete cds /cds=(45,4181) /gb=U62897 /gi=2406562 /ug=Rn.4093 /len=4377	0.030797972	carboxypeptidase D
J02962 Rat IgE binding protein mRNA, complete cds / cds=(40,828) /gb=J02962 /gi=203173 /ug=Rn.764 /len=948	0.028416325	lectin, galactose binding, soluble 3
M11942 RATHSPA Rat 70 kd heat-shock-like protein mRNA, complete cds	0.039718652	heat shock protein 8
M89945mRNA RATFARDIPH Rat farnesyl diphosphate synthase gene, exons 1-8	0.034801441	farensyl diphosphate synthase
M17701 RATGAPDHA Rat glyceraldehyde-3-phosphate-dehydrogenase (GAPDH) mRNA, complete cds	0.037952753	glyceraldehyde-3-phosphate dehydrogenase
rc_AI171506 EST217469 Rattus norvegicus cDNA, 3 end /clone=RMUBL83 /clone_end=3 /gb=AI171506 /gi=3711546 /ug=Rn.6428 /len=496	0.022330557	malic enzyme 1
rc_AA875470 UI-R-E0-cp-c-12-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-cp-c-12-0-UI /clone_end=3 /gb=AA875470 /gi=2980418 /ug=Rn.2253 /len=438	0.036731734	Similar to COP9 complex subunit 7a; COP9 subunit 7A
X53949cds RSGALEM Rat galE mRNA for UDP-galactose 4-epimerase homologue (EC 5.1.3.2)	0.023461761	galactose-4-epimerase, UDP
rc_AA859496 UI-R-E0-bv-g-08-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-bv-g-08-0-UI /clone_end=3 /gb=AA859496 /gi=2949016 /ug=Rn.5933 /len=503	0.046224085	—
rc_AA875127 UI-R-E0-bu-d-05-0-UI.s2 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-bu-d-05-0-UI /clone_end=3 /gb=AA875127 /gi=2980075 / ug=Rn.18698 /len=579	0.032986043	Similar to cell division cycle 2-like 5 isoform 1; CDC2-related protein kinase 5
X74565cds RNTBFII R.norvegicus TBFII mRNA for polypyrimidine tract binding protein	0.04404035	polypyrimidine tract binding protein 1
rc_AI145502 UI-R-BT0-qf-h-09-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-BT0-qf-h-09-0-UI /clone_end=3 /gb=AI145502 /ug=Rn.6332 / len=443	0.04131259	prostaglandin F2 receptor negative regulator
AB020504 Rattus norvegicus mRNA for PMF31, complete cds	0.036322804	PMF32 protein
X56729mRNA RSCALPST Rat mRNA for calpastatin	0.017722025	calpastatin
AF030378 Rattus norvegicus angiopoietin-2 mRNA, partial cds	0.027547932	Angiopoietin-2
X73371 R.norvegicus mRNA for Fc gamma receptor /cds=(124,981) /gb=X73371 /gi=397576 /ug=Rn.10363 /len=1430	0.023205774	Fc receptor, IgG, low affinity IIb
X12535cds RNRASP23 Rat mRNA for ras-related protein p23	0.040834798	RAB7, member RAS oncogene family
rc_AA875127 UI-R-E0-bu-d-05-0-UI.s2 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-bu-d-05-0-UI /clone_end=3 /gb=AA875127 /gi=2980075 / ug=Rn.18698 /len=579	0.040003726	Similar to cell division cycle 2-like 5 isoform 1; CDC2-related protein kinase 5
AB017188 Rattus norvegicus mRNA for antisecretory factor, complete cds	0.034699914	proteasome (prosome, macropain) 26S subunit, non-ATPase, 4
rc_AA925246 UI-R-A1-eh-h-06-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A1-eh-h-06-0-UI /clone_end=3 /gb=AA925246 /gi=3072382 / ug=Rn.5598 /len=513	0.034964542	cathepsin K

Table 8a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
rc_AI176461_s_at	50.1	P	92.2	P	31.5	A	120.7	P	101.4	P	105.5	P
AB006914_at	64.1	P	85.1	P	76.9	P	99.1	P	86.4	P	91.7	P
rc_AI058941_s_at	46.3	P	66.6	P	5.2	A	137.4	P	109.3	P	104	P
M25350_s_at	60.2	P	86.9	P	18.3	A	155.5	P	118.3	P	123	P
rc_AI044508_s_at	53.8	P	65.9	P	41.2	A	110.9	P	81.2	P	87.1	P
J04024_at	96.6	P	100.9	P	93.8	P	146.6	P	112	P	125.1	P
S69874_s_at	971.6	P	1003.2	P	890.5	P	1581.7	P	1185.1	P	1287.6	P
rc_AA800795_at	86.8	P	90.9	P	107	M	94.5	P	93	P	97.3	P
rc_AA891690_g_at	330.3	P	364.2	P	354	P	471	P	476.5	P	525.7	P
D38072_at	39.1	P	48.1	P	10	A	75.2	P	78.4	P	89	P
rc_AA875470_g_at	118.6	P	126.8	P	113.3	P	191.4	P	181	P	187.3	P
rc_AA944397_at	88	P	90.7	P	68.7	P	182.1	P	163.1	P	180	P
rc_AA818970_s_at	4.7	A	21.7	P	4.5	A	36.3	P	36.6	P	38.4	P
U75920_at	105.5	P	143.9	P	99	P	237.1	P	238.3	P	222.6	P
M15474cds_s_at	459.5	P	595.6	P	588	P	797.3	P	802.1	P	790.7	P
E12829cds_at	101.8	P	111.6	P	121.5	P	128.8	P	134.6	P	135.5	P
D49955_at	199.8	P	228.7	P	213	P	269.7	P	301.5	P	289.4	P
rc_AA900582_at	83.3	P	99.6	P	88	A	122.3	P	129.2	P	122.6	P
M34384_at	125.8	P	131.9	P	153.7	P	171.1	P	184.7	P	168.3	P
D90404_at	850	P	623.5	P	598	P	1655.5	P	2005.2	P	1745.8	P
U82612cds_at	129.2	P	137.8	P	56.5	A	512.4	P	506.5	P	447.8	P

Table 23a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
rc_AI176461 EST220046 Rattus norvegicus cDNA, 3 end /clone=ROVBS09 /clone_end=3 /gb=AI176461 /ug=Rn.10507 /len=534	0.049026954	golgi apparatus protein 1
AB006914 Rattus norvegicus mRNA for salt-tolerant protein, complete cds /cds=(48,1691) /gb=AB006914 /gi=2385507 /ug=Rn.10814 /len=1946	0.036057233	thyroid hormone receptor interactor 10
rc_AI058941 UI-R-C1-lr-b-07-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-C1-lr-b-07-0-UI /clone_end=3 /gb=AI058941 /ug=Rn.4231 /len=476	0.018298159	dimethylarginine dimethylaminohydrolase 1
M25350 RATPHOCAMB Rat cAMP phosphodiesterase (PDE4) mRNA, partial cds	0.026806516	phosphodiesterase 4B
rc_AI044508 UI-R-C1-kc-a-07-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-C1-kc-a-07-0-UI /clone_end=3 /gb=AI044508 /ug=Rn.2865 /len=372	0.027187353	neuron specific gene family member 1
J04024 Rat alternative brain Ca+2-ATPase mRNA, complete cds /cds=(238,3369) /gb=J04024 /gi=203060 /ug=Rn.2305 /len=5565	0.033693028	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2
S69874 C-FABP=cutaneous fatty acid-binding protein [rats, Sprague-Dawley, skin, mRNA, 704 nt]	0.030433	fatty acid binding protein 5, epidermal
rc_AA800795 EST190292 Rattus norvegicus cDNA, 3 end /clone=RLUAL54 /clone_end=3 /gb=AA800795 /gi=2863750 /ug=Rn.12068 /len=482	0.006501944	—
rc_AA891690 EST195493 Rattus norvegicus cDNA, 3 end /clone=RKIAF58 /clone_end=3 /gb=AA891690 /gi=3018569 /ug=Rn.22701 /len=446	0.003654639	Tumor necrosis factor ligand superfamily member 13 (A proliferation-inducing ligand)
D38072 Rat mRNA for protein tyrosine phosphatase, complete cds /cds=(134,1282) /gb=D38072 /gi=567262 /ug=Rn.10707 /len=1608	0.016256729	protein tyrosine phosphatase, non-receptor type 12
rc_AA875470 UI-R-E0-cp-c-12-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-cp-c-12-0-UI /clone_end=3 /gb=AA875470 /gi=2980418 /ug=Rn.2253 /len=438	0.002287671	Similar to COP9 complex subunit 7a; COP9 subunit 7A
rc_AA944397 EST199896 Rattus norvegicus cDNA, 3 end /clone=REMAG54 /clone_end=3 /gb=AA944397 /gi=3104313 /ug=Rn.5916 /len=542	0.001345559	heat shock protein 1, alpha
rc_AA818970 UI-R-A0-as-g-05-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A0-as-g-05-0-UI /clone_end=3 /gb=AA818970 /gi=2888556 /ug=Rn.11412 /len=616	0.008499791	endothelin receptor type B
U75920 RNAPCBP1 Rattus norvegicus APC binding protein EB1 mRNA, complete cds	0.00280135	microtubule-associated protein, RP/EB family, member 1
M15474cds RATTMA5 Rat alpha-tropomyosin gene, exon 11	0.001930443	tropomyosin 1, alpha
E12829cds cDNA encoding novel rat protein TIP120 which is formed of complex with TBP (TATA binding protein)	0.002862258	TBP-interacting protein 120A
D49955 Rat mRNA for bone marrow stromal cell antigen 1 (BST-1), complete cds /cds=(18,977) /gb=D49955 /gi=1255901 /ug=Rn.10728 /len=1411	0.00976361	bone marrow stromal cell antigen 1
rc_AA900582 UI-R-E0-dn-b-10-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-dn-b-10-0-UI /clone_end=3 /gb=AA900582 /gi=3035936 /ug=Rn.780 /len=495	0.008633928	alpha-2-macroglobulin
M34384 Rat nestin mRNA, complete cds /cds=(127,5544) /gb=M34384 /gi=205663 /ug=Rn.9701 /len=5946	0.001844659	nestin
D90404 RATCATC Rat mRNA for cathepsin C	0.002000623	cathepsin C
U82612cds RNU82612 Rattus norvegicus fibronectin (fn-1) gene, partial cds	0.000455997	fibronectin 1

Table 9a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
X94185cds_s_at	212.1	P	202.7	P	171.7	P	449.5	P	488.8	P	451.6	P
E13644cds_s_at	30.9	P	48	P	34	A	72.2	P	75.1	P	95.1	P
U35345_s_at	16.7	P	23.7	P	21.4	A	43.8	P	52.2	P	62.3	P
U82612cds_g_at	118.9	P	191.8	P	137.4	P	490.3	P	491.1	P	612.6	P
U70988cds_s_at	16.7	A	23.3	P	25.9	A	43.5	P	46.4	P	52.2	P
AJ006971_at	183.7	P	272.3	P	238.9	P	292.9	P	321.1	P	308.4	P
M86389cds_s_at	185.5	P	274.4	P	247.5	P	301.6	P	312.2	P	307.5	P
M21354_s_at	2564.5	P	4578.8	P	3238.4	P	4710.5	P	5037.9	P	5210.1	P
rc_AA799571_at	279.7	P	448.4	P	311.5	P	486.9	P	615.5	P	605.8	P
X07648cds_at	533.4	P	833.4	P	597.4	P	923.5	P	1068.6	P	1054.9	P
M96630_at	104.9	P	182.1	P	39.4	A	218.7	P	321.9	P	258.5	P
rc_AA799637_g_at	12.1	A	25	P	7.3	A	28.4	P	44.6	P	38.8	P
L09656_at	20.6	P	30.8	P	20.7	A	32.8	P	46	P	39.5	P
D84477_at	168.3	P	391.9	P	139.5	P	406.1	P	650.8	P	522.1	P
U83895_at	26	A	39.5	P	30.4	A	43.8	P	57.3	A	51.9	P
Z14118cds_g_at	11	A	24.5	P	16.7	A	25.1	P	37.6	P	36.4	P
rc_AA859648_at	92.1	P	112.2	P	130.8	A	117.3	P	160.4	P	145.1	P
U04740_at	25	P	39.7	P	36.8	A	53	P	77	P	69.8	P
U90448_at	104.7	P	196.4	P	210.5	P	301.9	P	428.8	P	385.3	P
M15358cds_at	370.8	P	624.8	P	86.2	P	1023.4	P	2393.6	P	1590.2	P
X95990exon_s_at	115.7	P	165.1	P	139.6	M	221.5	P	343.2	P	270	P
rc_AI170379_at	93.5	P	102.6	P	110.6	P	143	P	195	P	170.5	P

Table 24a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
X94185cds RNMKP3 R.norvegicus mRNA for dual specificity phosphatase, MKP-3	0.00061484	dual specificity phosphatase 6
E13644cds cDNA encoding Neurodap-1 which is located at the post-synaptic membrane thickening regions of neurons and contains RING-H2 finger motif	0.007444941	praja 2, RING-H2 motif containing
U35345 Rattus norvegicus serine/threonine kinase (gamma-PAK) mRNA, complete cds /cds=(48,1622) /gb=U35345 /gi=1016004 /ug=Rn.10116 /len=1756	0.003944237	p21 (CDKN1A)-activated kinase 2
U82612cds RNU82612 Rattus norvegicus fibronectin (fn-1) gene, partial cds	0.000999483	fibronectin 1
U70988cds RNU70988 Rattus norvegicus CXC chemokine receptor (CXCR2) gene, complete cds	0.000800686	interleukin 8 receptor, beta
AJ006971 RNO6971 Rattus norvegicus mRNA for DAP-like kinase	0.026929322	Death-associated like kinase
M86389cds RATHSP27A Rat heat shock protein (Hsp27) mRNA, complete cds	0.024274807	heat shock 27kDa protein 1
M21354 RATCOL3A1 Rat collagen type III alpha-1 mRNA, partial cds	0.04894407	collagen, type III, alpha 1
rc_AA799571 EST189068 Rattus norvegicus cDNA, 3 end /clone=RHEAC67 /clone_end=3 /gb=AA799571 /gi=2862526 /ug=Rn.3458 /len=541	0.026541151	Similar to RIKEN cDNA 1110001M20
X07648cds RNAG Rat mRNA for amyloidogenic glycoprotein (rAG), cognate of human A4 amyloid precursor protein	0.023547008	amyloid beta (A4) precursor protein
M96630 RATSEC61B Rattus rattus sec61 homologue mRNA, complete cds	0.036655206	SEC61, alpha subunit (S. cerevisiae)
rc_AA799637 EST189134 Rattus norvegicus cDNA, 3 end /clone=RHEAD45 /clone_end=3 /gb=AA799637 /gi=2862592 /ug=Rn.25425 /len=571	0.033698899	Similar to Golgi coiled coil protein GCC185
L09656 Rat salivary-specific cAMP response element-binding protein alpha mRNA, complete cds /cds=(203,2326) /gb=L09656 /gi=310225 /ug=Rn.9916 /len=2535	0.039118587	transcription factor 12
D84477 Rattus norvegicus mRNA for RhoA, partial cds	0.049476701	plysia ras-related homolog A2
U83895 Rattus norvegicus sec7A mRNA, complete cds /cds=(75,1271) /gb=U83895 /gi=1800314 /ug=Rn.10672 /len=1399	0.024757689	pleckstrin homology, Sec7 and coiled/coil domains 1
Z14118cds RNPDGFACE R.norvegicus mRNA for platelet-derived growth factor receptor alpha (extracellular domain)	0.039416226	Platelet derived growth factor receptor, alpha polypeptide
rc_AA859648 UI-R-E0-bs-b-01-0-UI.s1 UI-R-E0 Rattus norvegicus cDNA clone UI-R-E0-bs-b-01-0-UI 3 similar to dbj D85429 D85429 Human DNA for heat shock protein 40, complete cds, mRNA sequence [Rattus norvegicus]	0.046287981	Similar to heat shock protein 40
U04740 Rattus norvegicus Sprague-Dawley platelet-activating factor receptor mRNA, complete cds /cds=(119,1144) /gb=U04740 /gi=470384 /ug=Rn.10137 /len=1301	0.013264912	platelet-activating factor receptor
U90448 RNU90448 Rattus norvegicus CXC chemokine LIX mRNA, complete cds	0.009327888	CXC chemokine LIX
M15358cds RATMHRTB5 Rat MHC class II RT1.B beta gene, encoding cell surface glycoprotein beta chain, exon 6	0.039110392	RT1 class II, locus Bb
X95990exon RNC5ARECP R.norvegicus mRNA for C5a anaphylatoxin receptor	0.020817002	complement component 5, receptor 1
rc_AI170379 EST216305 Rattus norvegicus cDNA, 3 end /clone=RLUCH58 /clone_end=3 /gb=AI170379 /gi=3710419 /ug=Rn.15696 /len=688	0.009773891	—

Table 10a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
U05014_g_at	346.5	P	382.1	P	423.8	P	392.4	P	483.8	P	466	P
M19533mRNA_i_at	1712.7	P	1898.6	P	2055.5	P	1935.6	P	2189.2	P	2296.4	P
X60651mRNA_s_at	91.7	P	125.2	P	65.6	A	143.9	P	218.4	P	241.3	P
rc_AI234604_s_at	1983.6	P	2288.9	P	2195.7	P	2693.9	P	3119.9	P	3384.9	P
rc_AI137862_s_at	181.7	P	221.4	P	211.7	P	220.8	P	252.9	P	278	P
AF081148_s_at	31.4	P	34.8	P	3.9	A	57.8	P	77.4	P	78	P
AJ011115_at	19.6	P	18.4	P	11.6	A	28.7	P	40.6	P	41.3	P
U63923_at	116.6	P	119.9	P	47.5	A	157.1	P	261.1	P	239.9	P
AF004811_at	85	P	115.2	P	51.6	M	179	P	285.7	P	257.5	P
M91466_at	37.2	P	41.8	P	32.6	A	49.6	P	67.8	P	63.4	P
rc_AI639411_at	73.1	P	72.1	P	67.9	P	80	P	88.7	P	92.7	P
L25331_at	249.2	P	348.3	P	267.3	P	415.7	P	409	P	346.3	P
U41845_at	24.7	M	41.5	P	23.7	A	50.8	P	51.7	P	43	P
rc_AI176456_at	1474.4	P	2310.3	P	1100.5	P	4018.3	P	3956.8	P	3067.4	P
L38615_at	27.2	P	49.2	P	14	A	74.9	P	77.9	P	59.9	P
U31598_s_at	313.1	P	468.8	P	235.4	P	535.5	P	617.5	P	569.3	P
M83676_at	126.8	P	162.8	P	127.1	A	189.4	P	200.3	P	183	P
rc_AI235585_s_at	692	P	1209.4	P	464.3	P	1446	P	1607.5	P	1419.2	P
AF033027_at	25.6	P	43.8	P	6.2	A	57.3	P	72.5	P	57.6	P
M21476_s_at	209.2	P	349.8	P	106.4	P	437.4	P	547.1	P	424.7	P
rc_AI237535_s_at	370.6	P	568.4	P	309.8	P	703.9	P	826.8	P	702.5	P
Z18877_s_at	122.5	P	162	P	123	A	195.2	P	222.8	P	189.3	P

Table 25a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
U05014 RNU05014 Rattus norvegicus Sprague/Dawley PHAS-I mRNA, complete cds	0.036370978	eukaryotic translation initiation factor 4E binding protein 1
M19533mRNA RATCYCA Rat cyclophilin mRNA, complete cds	0.030475149	peptidylprolyl isomerase A
X60651mRNA RNSYNDCN Rat mRNA for syndecan	0.034184855	syndecan 1
rc_AI234604 EST231166 Rattus norvegicus cDNA, 3 end /clone=RLUDC11 /clone_end=3 /gb=AI234604 /ug=Rn.3672 /len=454	0.01191943	heat shock protein 8
rc_AI137862 UI-R-C0-ik-g-07-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-C0-ik-g-07-0-UI /clone_end=3 /gb=AI137862 /ug=Rn.3293 /len=502	0.044226754	mitogen activated protein kinase 14
AF081148 Rattus norvegicus CL2AA mRNA, complete cds	0.015478239	latrophilin 2
AJ011115 RNO011115 Rattus norvegicus mRNA for endothelial nitric oxide synthase, 5 region, partial	0.015529454	nitric oxide synthase 3, endothelial cell
U63923 RRU63923 Rattus rattus thioredoxin reductase mRNA, complete cds	0.036337699	thioredoxin reductase 1
AF004811 Rattus norvegicus moesin mRNA, complete cds /cds=(98,1831) /gb=AF004811 /gi=2218138 /ug=Rn.10773 /len=2099	0.014355505	moesin
M91466 Rattus norvegicus A2b-adenosine receptor mRNA, complete cds /cds=(107,1105) /gb=M91466 /gi=202587 /ug=Rn.10428 /len=1839	0.024236302	adenosine A2B receptor
Rat mixed-tissue library Rattus norvegicus cDNA clone rx04714 3 , mRNA sequence [Rattus norvegicus]	0.039351095	P55
L25331 Rattus norvegicus lysyl hydroxylase mRNA, complete cds /cds=(143,2329) /gb=L25331 /gi=409058 /ug=Rn.4445 /len=2987	0.047904578	procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase)
U41845 Rattus norvegicus putative nuclear pore complex protein (Npap60) mRNA, complete cds /cds=(320,1465) /gb=U41845 /gi=1915964 /ug=Rn.3242 /len=2994	0.043171395	nuclear pore associated protein
rc_AI176456 EST220041 Rattus norvegicus cDNA, 3 end /clone=ROVBR96 /clone_end=3 /gb=AI176456 / ug=Rn.6145 /len=370	0.013374637	—
L38615 Rattus norvegicus glutathione synthetase mRNA, complete cds /cds=(44,1468) /gb=L38615 /gi=755063 /ug=Rn.1692 /len=1882	0.025068953	glutathione synthetase
U31598 RNU31598 Rattus norvegicus MHC class II-like alpha chain (RT1.DMa) mRNA, partial cds	0.035732439	major histocompatibility complex, class II, DM alpha
M83676 Sprague-Dawley (clone LRB6) RAB12 mRNA, 3 end /cds=(0,593) /gb=M83676 /gi=206530 /ug=Rn.11021 /len=678	0.025264926	RAB12, member RAS oncogene family
rc_AI235585 EST232147 Rattus norvegicus cDNA, 3 end /clone=ROVCT80 /clone_end=3 /gb=AI235585 / ug=Rn.11085 /len=384	0.03740925	cathepsin D
AF033027 Rattus norvegicus prenylated SNARE protein Ykt6p (Ykt6) mRNA, complete cds /cds=(0,596) /gb=AF033027 /gi=2642347 /ug=Rn.11358 /len=597	0.034513416	prenylated SNARE protein
M21476 RAT5MDA Rat iodothyronine 5 -monodeiodinase (5 -MD) mRNA, partial cds	0.037715103	prolyl 4-hydroxylase, beta polypeptide
rc_AI237535 EST234097 Rattus norvegicus cDNA, 3 end /clone=RPLDA30 /clone_end=3 /gb=AI237535 / ug=Rn.6940 /len=472	0.024119482	LPS-induced TNF-alpha factor
Z18877 R.norvegicus mRNA for 2 5 oligoadenylate synthetase /cds=(69,1145) /gb=Z18877 /gi=56789 /ug=Rn.10383 /len=1421	0.022020341	2',5'-oligoadenylate synthetase 1, 40/46kDa

Table 11a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
M74494_g_at	182	P	376.4	P	71.3	P	528.6	P	668.8	P	424.3	P
E01524cds_s_at	104.5	P	126.5	P	111.1	P	140.7	P	160.5	P	136.2	P
D45247_at	584.5	P	871.4	P	658.1	P	945.6	P	1148.4	P	952.1	P
S77528cds_s_at	83.9	P	101.3	P	64.7	A	141.9	P	200.5	P	126	P
rc_AA892260_g_at	141.4	P	149.2	P	155.5	P	191.1	P	214.8	P	173.9	P
AF087944mRNA_s_at	260.1	P	336.9	P	139.1	P	684.4	P	857.2	P	544.5	P
X56596_at	268.4	P	370.3	P	192.1	P	589.9	P	768.6	P	500.9	P
rc_AA875665_at	247.9	P	397.8	P	199.8	P	570	P	743.3	P	494.2	P
rc_AI172064_at	3351.5	P	4083.6	P	4195.5	P	4655.5	P	4971	P	4247.8	P
D10874_at	920.1	P	1288	P	1122.4	P	1615.6	P	1797.4	P	1556.8	P
AF065438_at	825.7	P	939.5	P	582.7	P	1376.2	P	1475.3	P	1025	P
L23088_at	137.2	P	143	P	75.9	P	199.1	P	224.4	P	189.3	P
X54467_at	1058.3	P	1112.4	P	855.4	P	1473.1	P	1542.6	P	1389	P
X82396_at	2501.6	P	2741.8	P	2028.7	P	3232.9	P	3644.2	P	3155.4	P
AF087431_at	99.6	P	109.8	P	101.7	P	132.3	P	141.9	P	122.9	P
AF087943_s_at	584.5	P	528.8	P	253.9	P	979.6	P	1240.7	P	775.9	P
Z49761_at	209.2	P	211.6	P	200.2	P	296.7	P	331.5	P	276.5	P
U35774_at	173.4	P	191.8	P	89.7	P	361.7	P	423.3	P	322.3	P
M13979_at	77.1	P	67.1	P	41.2	A	151.6	P	174.7	P	121.3	P
rc_AA955306_at	424	P	398.7	P	386.2	P	629.1	P	633.8	P	559.2	P
J02780_at	632.5	P	696.2	P	398.1	P	1293.6	P	1254.7	P	1064.6	P

Table 26a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
M74494 Rat sodium/potassium ATPase alpha-1 subunit truncated isoform mRNA, 3 end /cds=(0,731) /gb=M74494 /gi=205629 /ug=Rn.2992 /len=936	0.043051889	ATPase, Na+/K+ transporting, alpha 1 polypeptide
E01524cds DNA encoding soluble NADPH-cytochrome P450 redutase	0.036886027	P450 (cytochrome) oxidoreductase
D45247 RATPSRCX Rat mRNA for proteasome subunit RCX, complete cds	0.041817495	Proteasome (prosome, macropain) subunit, beta type 5
S77528cds rNFIL-6=C/EBP-related transcription factor [rats, Genomic/mRNA, 1759 nt]	0.046313788	CCAAT/enhancer binding protein (C/EBP), beta
rc_AA892260 EST196063 Rattus norvegicus cDNA, 3 end /clone=RKIAO30 /clone_end=3 /gb=AA892260 / gi=3019139 /ug=Rn.9526 /len=554	0.01841651	Similar to tex261
AF087944mRNA Rattus norvegicus monocyte differentiation antigen CD14 gene, promoter region and partial cds	0.015601243	CD14 antigen
X56596 Rat mRNA for MHC class II antigen RT1.B-1 beta-chain /cds=(7,798) /gb=X56596 /gi=57152 / ug=Rn.20089 /len=1374	0.024561684	RT1 class II, locus Bb
rc_AA875665 UI-R-E0-cn-h-07-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-cn-h-07-0-UI /clone_end=3 /gb=AA875665 /gi=2980613 /ug=Rn.2997 /len=346	0.029613766	Reticulocalbin 3
rc_AI172064 EST218059 Rattus norvegicus cDNA, 3 end /clone=RMUBU47 /clone_end=3 /gb=AI172064 /gi=3712104 /ug=Rn.57 /len=509	0.026755839	lectin, galactose binding, soluble 1
D10874 Albino rat cDNA for 16 kDa subunit of vacuolar H(+)-ATPases /cds=(95,562) /gb=D10874 /gi=220905 /ug=Rn.1869 /len=1082	0.011532148	ATPase, H+ transporting, lysosomal (vacuolar proton pump) 16 kDa
AF065438 Rattus norvegicus mama mRNA, complete cds /cds=(155,1879) /gb=AF065438 /gi=3152927 / ug=Rn.3251 /len=2151	0.047187473	lectin, galactoside-binding, soluble, 3 binding protein
L23088 Rattus norvegicus P-selectin mRNA, complete cds /cds=(18,2324) /gb=L23088 /gi=349552 /ug=Rn.10012 /len=3185	0.031518512	selectin, platelet
X54467 Rat mRNA for preprocathepsin D (EC 3.4.23.5) /cds=(56,1279) /gb=X54467 /gi=55881 /ug=Rn.11085 /len=1934	0.020299973	cathepsin D
X82396 R.norvegicus mRNA for cathepsin B /cds=(61,1080) /gb=X82396 /gi=1524327 /ug=Rn.6171 /len=1872	0.043035723	cathepsin B
AF087431 Rattus rattus glycoprotein processing glucosidase I mRNA, complete cds	0.022296612	glucosidase 1
AF087943 Rattus norvegicus CD14 mRNA, complete cds	0.036342965	CD14 antigen
Z49761 R.norvegicus mRNA for RT1.Ma /cds=(23,805) /gb=Z49761 /gi=1296988 /ug=Rn.11298 /len=1049	0.010896393	major histocompatibility complex, class II, DM alpha
U35774 Rattus norvegicus cytosolic branch chain aminotransferase mRNA, complete cds /cds=(62,1297) /gb=U35774 /gi=1173633 /ug=Rn.8273 /len=1370	0.009607159	branched chain aminotransferase 1, cytosolic
M13979 Rat brain glucose-transporter protein mRNA, complete cds /cds=(208,1686) /gb=M13979 /gi=204413 /ug=Rn.3205 /len=2571	0.01240714	solute carrier family 2 (facilitated glucose transporter), member 1
rc_AA955306 UI-R-A1-ew-b-03-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A1-ew-b-03-0-UI /clone_end=3 /gb=AA955306 /ug=Rn.4579 / len=562	0.006124412	—
J02780 Rat tropmyosin (TM-4) mRNA, complete cds / cds=(26,772) /gb=J02780 /gi=207503 /ug=Rn.11115 /len=900	0.008127395	tropomyosin 4

Table 12a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
U59801_at	22.1	P	22.3	P	10.9	A	45.1	P	44.4	P	35.7	P
X97443_s_at	301.4	P	358.4	P	181.1	P	580.9	P	581.8	P	492.7	P
AFFX_Rat_GAPDH_M_at	2593.7	P	3016.7	P	2289	P	4160.7	P	4048.5	P	3503.6	P
X96437mRNA_at	123.6	P	136.7	P	115.2	P	225.8	P	223	P	171.1	P
U15550_at	122.6	P	63.5	P	5.9	A	191.4	P	275.6	P	178.7	P
U26595_at	374.5	P	280.5	P	304	P	434.4	P	543.5	P	419.6	P
AB005900_at	91.4	P	56.8	P	64.2	P	121.4	P	165	P	123.8	P
M62642_at	25.9	P	19.9	M	24.1	A	32.2	P	39.9	P	30	P
U12402_at	287	P	231.1	P	232.7	P	316.2	P	380.4	P	331.7	P
M24067_at	649.1	P	273.7	P	337.7	P	1051.8	P	1407	P	758.5	P
U09401_s_at	57.6	P	32.1	P	4.4	A	115.8	P	190.1	P	155.6	P
S61868_at	365.6	P	346.5	P	307	P	499.6	P	648.8	P	503.1	P
rc_AI071531_s_at	145.1	P	99.2	P	66.3	A	267.3	P	432.2	P	288.7	P
D86373_s_at	47.7	P	62.4	P	25	A	85.5	P	128	P	99.7	P
S66024_at	22.5	P	32.3	M	6.9	A	47.7	P	76.6	P	49.8	P
U04835_at	25.4	P	28.6	P	23.7	A	43.7	P	58.6	P	44.9	P
U49930_at	42.2	P	45	P	35.5	P	62.4	P	81.3	P	71.2	P
D86641_at	383.8	P	420.5	P	377.1	P	553.9	P	725.1	P	631.1	P
X69903_at	157.9	P	170.5	P	63.1	A	249.5	P	343.3	P	271.8	P
S56464mRNA_g_at	67	P	58.7	P	11.2	A	93.3	P	133.7	P	109.1	P
AB002086_g_at	469.8	P	415.6	P	547.1	P	510.7	P	483.6	P	474.6	P

Table 27a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
U59801 RNU59801 Rattus norvegicus integrin alpha-M (Itgam) mRNA, partial cds	0.010932137	integrin alpha M
X97443 R.norvegicus mRNA for transmembrane protein Tmp21-I /cds=(0,611) /gb=X97443 /gi=1360135 /ug=Rn.22674 /len=706	0.014377536	integral membrane protein Tmp21-I (p23)
R. norvegicus /GEN=gapd /DB_XREF=gb:X02231.1 /DEF=Rat mRNA for glyceraldehyde-3-phosphate-dehydrogenase (GAPDH) (GAPDH, EC 1.2.1.12).	0.020986944	glyceraldehyde-3-phosphate dehydrogenase
X96437mRNA RNPRG1 R.norvegicus PRG1 gene	0.015268304	immediate early response 3
U15550 RNU15550 Rattus norvegicus tenascin-C mRNA, partial cds	0.030391377	Tenascin C
U26595 Rattus norvegicus prostaglandin F2a receptor regulatory protein precursor, mRNA, complete cds / cds=(46,2685) /gb=U26595 /gi=1054883 /ug=Rn.6332 /len=5825	0.042095775	prostaglandin F2 receptor negative regulator
AB005900 Rattus norvegicus mRNA for endothelial receptor for oxidized low-density lipoprotein, complete cds /cds=(91,1185) /gb=AB005900 /gi=3077733 /ug=Rn.14541 /len=3750	0.022729284	oxidised low density lipoprotein (lectin-like) receptor 1
M62642 Rat (clone pRHx1) hemopexin mRNA, complete cds /cds=(22,1404) /gb=M62642 /gi=554442 /ug=Rn.2380 /len=1484	0.031337421	hemopexin
U12402 Rattus norvegicus Sprague-Dawley rARL1 mRNA, complete cds /cds=(25,570) /gb=U12402 /gi=529679 /ug=Rn.11401 /len=832	0.038408327	ADP-ribosylation factor-like 1
M24067 Rattus norvegicus plasminogen activator inhibitor-1 (PAI-1) mRNA, complete cds /cds=(118,1326) /gb=M24067 /gi=577500 /ug=Rn.11203 /len=3053	0.04231207	serine (or cysteine) proteinase inhibitor, member 1
U09401 RNU09401 Rattus norvegicus clone p12.3 tenascin mRNA, partial cds	0.010663928	tenascin C
S61868 ryudocan=heparan sulfate proteoglycan core protein [rats, microvascular endothelial cells, mRNA, 2462 nt]	0.021943319	syndecan 4
rc_AI071531 UI-R-C1-ky-b-05-0-UI.s2 Rattus norvegicus cDNA, 3 end /clone=UI-R-C1-ky-b-05-0-UI /clone_end=3 /gb=AI071531 /ug=Rn.14541 /len=451	0.018570682	oxidised low density lipoprotein (lectin-like) receptor 1
D86373 Rattus norvegicus mRNA for acyl-coenzyme A-cholesterol acyltransferase, complete cds /cds=(91,1728) /gb=D86373 /gi=3036904 /ug=Rn.13213 /len=1750	0.025827794	acyl-coenzyme A:cholesterol acyltransferase
S66024 transcriptional repressor CREM [rats, pineal gland, mRNA, 436 nt]	0.035995281	cAMP responsive element modulator
U04835 Rattus norvegicus CREMdeltaC-G gene, complete cds /cds=(8,460) /gb=U04835 /gi=1256545 /ug=Rn.10251 /len=607	0.012551525	cAMP responsive element modulator
U49930 Rattus norvegicus ICE-like cysteine protease (Lice) mRNA, complete cds /cds=(26,859) /gb=U49930 /gi=1518935 /ug=Rn.10562 /len=1249	0.012289612	caspase 3
D86641 Rattus norvegicus mRNA for FK506-binding protein 12, complete cds	0.012544648	FK506 binding protein 2 /// FK506-binding protein 1a
X69903 R.norvegicus mRNA for interleukin 4 receptor /cds=(9,2411) /gb=X69903 /gi=56390 /ug=Rn.10471 /len=2450	0.026783348	interleukin 4 receptor
S56464mRNA S56463S2 HKII=hexokinase II [rats, epididymal fat pad, mRNA Partial, 1456 nt, segment 2 of 2]	0.035340531	—
AB002086 Rattus norvegicus mRNA for p47, complete cds /cds=(108,1220) /gb=AB002086 /gi=2285789 / ug=Rn.2771 /len=1451	0.047110266	p47 protein

Table 13a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
AF072892_s_at	587.7	P	326.8	P	455.4	P	1056.8	P	781.5	P	794.5	P
rc_AA893846_at	1160	P	503.4	P	644.8	P	2226.9	P	1757.5	P	1426.2	P
L01624_at	316.5	P	218.5	P	289.1	P	581.2	P	387.1	P	464.3	P
U04319_at	77.6	P	51.8	P	90.2	A	150.5	P	120.4	P	114.4	P
Z11504cds_at	45.8	P	36.9	P	50.3	P	76.9	P	67.8	P	58.5	P
L32132_at	324.6	P	269	P	386.2	P	610	P	506.1	P	448	P
J02722cds_at	229.1	P	172.8	P	210	P	632.2	P	429.7	P	487.4	P
S82911_at	122	P	104.6	P	164.2	P	314.4	P	248.3	P	251.9	P
U22414_at	210.3	P	85.5	P	239.6	P	515.4	P	316	P	326.6	P
D86711_at	90.2	P	89.8	P	125.3	P	139.5	P	111.1	P	116	P
U17035_s_at	43.1	P	33.5	P	76.5	M	114.3	P	73	P	74.5	P
rc_AA955477_g_at	120.4	P	121.7	P	152.2	P	182	P	165.7	P	134.3	P
M58364_at	84.2	P	107.8	P	125.7	P	222.7	P	183.4	P	142.8	P
D10106_s_at	52.8	P	72.7	P	70	A	118.7	P	113.3	P	87.9	P
AB017596_at	27.1	A	38	P	48	A	90.7	P	88.7	P	59.8	P
X17163cds_s_at	38.3	P	71.4	P	81.9	P	148.3	P	167.5	P	102.3	P
X02601_at	118.7	P	108	P	175.9	P	391.6	P	458.6	P	215.9	P
rc_AA818604_s_at	16.1	P	20.5	P	18.7	A	66.4	P	76.3	P	41.6	P
rc_AA892791_at	170.2	P	217.3	P	198.9	P	405	P	406.5	P	266	P
X12459_at	45	P	64.1	P	48.4	A	234.1	P	256.1	P	113.3	P
rc_AI176710_at	18.5	P	23.5	P	21.8	A	72.9	P	71.5	P	32.4	P

Table 28a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
AF072892 Rattus norvegicus versican V3 isoform precursor, mRNA, complete cds	0.018279444	chondroitin sulfate proteoglycan 2 (versican)
rc_AA893846 EST197649 Rattus norvegicus cDNA, 3 end /clone=RPLAM46 /clone_end=3 /gb=AA893846 /gi=3020725 /ug=Rn.3715 /len=402	0.026123768	—
L01624 Rattus norvegicus serum and glucocorticoid-regulated kinase (sgk) mRNA, complete cds /cds=(65,1357) /gb=L01624 /gi=294636 /ug=Rn.4636 /len=2435	0.021892071	serum/glucocorticoid regulated kinase
U04319 Rattus norvegicus Fit-1S (Fit-1) mRNA, complete cds /cds=(201,1211) /gb=U04319 /gi=488278 / ug=Rn.10072 /len=2586	0.009300767	interleukin 1 receptor-like 1
Z11504cds RRNPV1R R.rattus mRNA for NPY-1 receptor	0.00982065	Neuropeptide Y receptor Y1
L32132 Rat lipopolysaccharide binding protein mRNA, complete cds /cds=(227,1672) /gb=L32132 /gi=510714 /ug=Rn.1404 /len=2622	0.010120158	lipopolysaccharide binding protein
J02722cds RATHOXA Rat heme oxygenase gene, complete cds	0.005637314	heme oxygenase (decycling) 1
S82911 rHox=rHox protein [rats, ROS 17/2.8 osteosarcoma cell line, mRNA, 1375 nt]	0.002011691	paired related homeobox 1
U22414 Rattus norvegicus macrophage inflammatory protein-1alpha mRNA, complete cds /cds=(69,347) /gb=U22414 /gi=790632 /ug=Rn.10139 /len=755	0.03695392	chemokine (C-C motif) ligand 3
D86711 D86711 Rattus norvegicus cDNA /gb=D86711 /gi=1549215 /ug=Rn.4240 /len=994	0.022332009	—
U17035 RRU17035 Rattus sp. (mob-1) mRNA, complete cds	0.048921717	chemokine (C-X-C motif) ligand 10
rc_AA955477 UI-R-A1-ex-f-01-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A1-ex-f-01-0-UI /clone_end=3 /gb=AA955477 /ug=Rn.8789 /len=394	0.03929932	Similar to Expressed sequence AI874665
M58364 Rat GTP cyclohydrolase I mRNA, complete cds /cds=(127,852) /gb=M58364 /gi=204536 /ug=Rn.5933 /len=1016	0.02050961	GTP cyclohydrolase 1
D10106 RATPDGFA Rat mRNA for platelet-derived growth factor A chain	0.013422874	platelet derived growth factor, alpha
AB017596 Rattus norvegicus PC1 mRNA for plasma cell membrane glycoprotein, partial cds	0.012604414	ectonucleotide pyrophosphatase/phosphodiesterase 1
X17163cds RSJUNAP1 Rat c-jun oncogene mRNA for transcription factor AP-1	0.020453371	v-jun sarcoma virus 17 oncogene homolog (avian)
X02601 Rat mRNA for 53 kD polypeptide induced by growth factors (EGF) and oncogenes (H-ras; src; polyoma middle T) /cds=(57,1484) /gb=X02601 / gi=57460 /ug=Rn.10435 /len=1771	0.034007216	matrix metalloproteinase 3
rc_AA818604 UI-R-A0-bc-h-02-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A0-bc-h-02-0-UI /clone_end=3 /gb=AA818604 /gi=2889343 / ug=Rn.1950 /len=516	0.014227834	heat shock 70kD protein 1B /// heat shock 70kD protein 1A
rc_AA892791 EST196594 Rattus norvegicus cDNA, 3 end /clone=RKIAX34 /clone_end=3 /gb=AA892791 / gi=3019670 /ug=Rn.7320 /len=635	0.023015033	excision repair cross-complementing repair deficiency, complementation group 1
X12459 Rat mRNA for argininosuccinate synthetase (EC 6.3.4.5) /cds=(14,1252) /gb=X12459 /gi=55766 /ug=Rn.5078 /len=1495	0.028600961	arginosuccinate synthetase
rc_AI176710 EST220303 Rattus norvegicus cDNA, 3 end /clone=ROVBV80 /clone_end=3 /gb=AI176710 / ug=Rn.10410 /len=632	0.042676571	nuclear receptor subfamily 4, group A, member 3

Table 14a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
U90610_at	339.1	P	302.1	P	226.8	P	774	P	946.9	P	555.5	P
rc_AA800175_at	210.4	P	218.8	P	238.6	P	282.7	P	295.9	P	230.8	P
rc_AA892859_at	226.9	P	155.3	P	226.1	P	287.6	P	291.7	P	238.1	P
X96437mRNA_g_at	185.2	P	119.1	P	182.3	P	236.1	P	262.1	P	214.4	P
S61868_g_at	572.9	P	374	P	618	P	934.1	P	924.2	P	721	P
AF052695_at	102.3	P	91.8	P	93	P	158.7	P	151.1	P	111.9	P
D63665_at	159.6	P	136.4	P	136	P	283.3	P	268.6	P	188.3	P
U87627_at	139	P	128.2	P	114.6	P	337.8	P	328.1	P	222.5	P
rc_AI236601_at	184.5	P	148.6	P	149.5	P	337.6	P	344.8	P	250.7	P
X07266cds_s_at	83.1	P	39.5	A	50.8	A	250.2	P	243.5	P	149.4	P
AF036537_at	106.1	P	87.2	P	105.6	A	186.2	P	182.5	P	147.6	P
U90610_g_at	289.4	P	226.6	P	273.4	P	488.6	P	514.1	P	374.2	P
rc_AA891838_at	110.9	P	99.1	A	126.4	A	137.1	P	141.3	P	120.7	M
rc_AA893860_at	288.3	P	225.5	P	284.7	P	399.6	P	389.2	P	335	P
rc_AA818951_at	2793.2	P	2060.7	P	2219.4	P	3566.5	P	3527.2	P	3015.6	P
rc_AI169327_g_at	2996.5	P	1613.1	P	1765.3	P	4043.6	P	3781.6	P	3065.5	P
M54926_at	2019.7	P	1579.4	P	1495.9	P	2560.9	P	2799.6	P	2195.7	P
S87522_g_at	1091.8	P	856.7	P	985.4	P	1229	P	1284.1	P	1137.1	P
rc_AA893173_at	393.5	P	348.5	P	360.1	P	439.2	P	460.3	P	437.1	P
U28938_at	233.8	P	206	P	184.4	P	308.3	P	313.4	P	286	P
M23697_at	560.4	P	418.5	P	364.4	P	817.3	P	788	P	704.8	P

Table 29a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
U90610 Rattus norvegicus CXC chemokine receptor (CXCR4) mRNA, complete cds /cds=(0,1049) /gb=U90610 /gi=1906612 /ug=Rn.5289 /len=1050	0.018261589	chemokine (C-X-C motif) receptor 4
rc_AA800175 EST189672 Rattus norvegicus cDNA, 3 end /clone=RHEAM08 /clone_end=3 /gb=AA800175 /gi=2863130 /ug=Rn.6291 /len=601	0.040286547	protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1
rc_AA892859 EST196662 Rattus norvegicus cDNA, 3 end /clone=RKIAY19 /clone_end=3 /gb=AA892859 / gi=3019738 /ug=Rn.8137 /len=568	0.035057433	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3
X96437mRNA RNPRG1 R.norvegicus PRG1 gene	0.022175736	immediate early response 3
S61868 ryudocan=heparan sulfate proteoglycan core protein [rats, microvascular endothelial cells, mRNA, 2462 nt]	0.013830246	syndecan 4
AF052695 Rattus norvegicus cell cycle protein p55CDC gene, complete cds /cds=(192,1691) /gb=AF052695 /gi=3088631 /ug=Rn.9262 /len=1777	0.035676393	cell cycle protein p55CDC
D63665 Rat mRNA for novel G protein-coupled P2 receptor, complete cds /cds=(439,1425) /gb=D63665 /gi=1066007 /ug=Rn.10671 /len=1922	0.026969924	pyrimidinergic receptor P2Y, G-protein coupled, 6
U87627 Rattus norvegicus putative monocarboxylate transporter (MCT3) mRNA, complete cds /cds=(89,1504) /gb=U87627 /gi=2463650 /ug=Rn.10826 /len=2118	0.011406901	monocarboxylate transporter
rc_AI236601 EST233163 Rattus norvegicus cDNA, 3 end /clone=ROVDI22 /clone_end=3 /gb=AI236601 / ug=Rn.2277 /len=625	0.011516373	Similar to heat shock protein 105 kDa alpha
X07266cds RRG33A Rat mRNA for gene 33 polypeptide	0.011190785	Similar to Mitogen-inducible gene 6 protein homolog (Mig-6) (Gene 33 polypeptide)
AF036537 Rattus norvegicus homocysteine respondent protein HCYP2 mRNA, complete cds	0.005282392	receptor-interacting serine-threonine kinase 3
U90610 Rattus norvegicus CXC chemokine receptor (CXCR4) mRNA, complete cds /cds=(0,1049) /gb=U90610 /gi=1906612 /ug=Rn.5289 /len=1050	0.012618133	chemokine (C-X-C motif) receptor 4
rc_AA891838 EST195641 Rattus norvegicus cDNA, 3 end /clone=RKIAH44 /clone_end=3 /gb=AA891838 / gi=3018717 /ug=Rn.24892 /len=537	0.017783131	ribosomal protein P0-like protein; 60S acidic ribosomal protein PO
rc_AA893860 EST197663 Rattus norvegicus cDNA, 3 end /clone=RPLAM73 /clone_end=3 /gb=AA893860 /gi=3020739 /ug=Rn.22757 /len=419	0.012049931	Threonyl-tRNA synthetase
rc_AA818951 UI-R-A0-as-e-04-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-A0-as-e-04-0-UI /clone_end=3 /gb=AA818951 /gi=2888537 /ug=Rn.1556 /len=474	0.029841991	pyruvate kinase, muscle
rc_AI169327 EST215162 Rattus norvegicus cDNA, 3 end /clone=RKIBQ31 /clone_end=3 /gb=AI169327 / gi=3705635 /ug=Rn.6841 /len=644	0.04661103	tissue inhibitor of metalloproteinase 1
M54926 Rat lactate dehydrogenase A mRNA, 3 end /cds=(0,179) /gb=M54926 /gi=205126 /ug=Rn.3687 /len=680	0.036607888	—
S87522 leukotriene A4 hydrolase [rats, mesangial cells, mRNA, 1925 nt]	0.040762553	Similar to Leukotriene A-4 hydrolase (LTA-4 hydrolase) (Leukotriene A(4) hydrolase)
rc_AA893173 EST196976 Rattus norvegicus cDNA, 3 end /clone=RKIBD12 /clone_end=3 /gb=AA893173 / gi=3020052 /ug=Rn.2547 /len=606	0.031477751	vacuolar protein sorting 29 isoform 2; vacuolar sorting protein VPS29/PEP11
U28938 Rattus norvegicus protein tyrosine phosphatase D30 mRNA, complete cds /cds=(62,3712) /gb=U28938 /gi=1144001 /ug=Rn.10163 /len=4871	0.016306037	protein tyrosine phosphatase, receptor type, O
M23697 Rat tissue-type plasminogen activator (t-PA) mRNA, complete cds /cds=(31,1710) /gb=M23697 /gi=530159 /ug=Rn.1002 /len=2445	0.014743514	plasminogen activator, tissue

Table 15a. ●●●

Probe Set ID	*Zocor_ Signal 1*	*Zocor_ Detection 1*	*Zocor_ Signal 2*	*Zocor_ Detection 2*	*Zocor_ Signal 3*	*Zocor_ Detection 3*	*Control_ Signal 1*	*Control_ Detection 1*	*Control_ Signal 2*	*Control_ Detection 2*	*Control_ Signal 3*	*Control_ Detection 3*
U03699complete_ seq_at	64.4	P	48.2	P	52.1	A	93.6	P	89.5	P	87.6	P
M95768_at	188.3	P	161.5	P	161.9	P	250.9	P	225.7	P	204.4	P
X57764_s_at	23.9	P	45.7	P	36.6	A	70.2	P	100.7	P	61.4	P
U04808_at	27.4	P	33.8	M	39.4	A	53.2	P	79.3	P	49.3	P
C07012_f_at	319.5	P	378.5	P	508.6	P	543.6	P	695.1	P	468.1	P
U50185_at	23.8	P	37.7	P	47.1	A	57.7	P	77	P	50.7	P
X05566_i_at	1457.9	P	1529.1	P	2008.6	P	1988	P	2179.2	P	1951.4	P
L02530_at	99.9	P	128.5	P	162.3	P	157.2	P	196.1	P	159.2	P
AF039891_s_at	56.4	A	74.9	P	98.5	A	99.4	M	128.1	P	104.9	P
A03913cds_s_at	109.4	P	182.9	P	210.1	P	281.4	P	375	P	306.7	P
U83896_at	137.5	P	198.2	P	221	P	228.3	P	257.6	P	210.3	P
AB017188_g_at	382.5	P	402.4	P	581.4	P	461.9	P	503.8	P	479	P
U09361_s_at	117.6	P	60.3	P	117.8	A	241.2	P	358.9	P	243.3	P
M32062_at	892.4	P	725.4	P	1044.8	P	1286.4	P	1780.5	P	1386.9	P
rc_AA892417_at	131.3	P	114.9	P	171.8	P	151.5	P	178.4	P	155	P
rc_AA899935_at	76.1	P	64.4	P	90.6	A	83.6	P	104.2	P	86.8	P
U77349cds_at	22.5	P	11.9	P	19.5	A	26.3	P	37.8	P	32.4	P
D26393exon_s_at	188.2	P	131	P	211.7	P	214.8	P	288.4	P	247.5	P
rc_AA799469_at	164.8	P	139.1	P	193.3	P	169.9	P	195.9	P	182.8	P
X06564_at	125.5	P	116.9	P	183.9	A	188.2	P	224.2	P	166.5	P
rc_AA800005_at	837.8	P	755	P	1114.9	P	1008.4	P	1021.8	P	944.2	P

Table 30a. ●●●

Descriptions	*t-test/Anova*	*Gene Title*
U03699completeSeq Rattus norvegicus Sprague Dawley inducible nitric oxide synthase (NOS) mRNA, complete cds /cds=UNKNOWN /gb=U03699 /gi=430718 /ug=Rn.10400 /len=3943	0.005271729	nitric oxide synthase 2, inducible
M95768 Rattus norvegicus di-N-acetylchitobiase mRNA, complete cds /cds=(0,1103) /gb=M95768 /gi=203452 /ug=Rn.11199 /len=1616	0.03289604	chitobiase, di-N-acetyl-
X57764 Rat mRNA for ET-B endothelin receptor /cds=(203,1528) /gb=X57764 /gi=56122 /ug=Rn.11412 /len=1892	0.031361675	endothelin receptor type B
U04808 Rattus norvegicus Sprague-Dawley putative G-protein coupled receptor (GCR) mRNA, complete cds /cds=(67,1131) /gb=U04808 /gi=2558635 /ug=Rn.10482 /len=1318	0.038160187	Rbs11 protein
C07012 C07012 Rat pancreatic islet cDNA Rattus norvegicus cDNA similar to cyclophilin c, mRNA sequence [Rattus norvegicus]	0.046666853	lectin, galactoside-binding, soluble, 3 binding protein
U50185 RNU50185 Rattus norvegicus kidney protein phosphatase 1 myosin binding subunit mRNA, partial cds	0.033664212	—
X05566 Rat mRNA for myosin regulatory light chain (RLC) /cds=(69,587) /gb=X05566 /gi=57086 /ug=Rn.6021 /len=910	0.003833286	Myosin regulatory light chain
L02530 Rattus norvegicus Drosophila polarity gene (frizzled) homologue mRNA, complete cds /cds=(78,1790) /gb=L02530 /gi=310114 /ug=Rn.9095 /len=1912	0.028602223	frizzled homolog 2 (Drosophila)
AF039891 Rattus norvegicus aminopeptidase N (APN) mRNA, partial cds	0.020133263	Aminopeptidase N (APN)
A03913cds R.norvegicus mRNA for glia-derived neurite-promoting factor (GdNPF)	0.009501821	Serine (or cysteine) proteinase inhibitor, clade E, member 2
U83896 Rattus norvegicus sec7B mRNA, complete cds /cds=(187,1389) /gb=U83896 /gi=1800316 /ug=Rn.3732 /len=1561	0.041353368	pleckstrin homology, Sec7 and coiled/coil domains 2
AB017188 Rattus norvegicus mRNA for antisecretory factor, complete cds	0.043397667	proteasome (prosome, macropain) 26S subunit, non-ATPase, 4
U09361 RNU09361 Rattus norvegicus clone p17.1 tenascin mRNA, partial cds	0.012355181	tenascin C
M32062 Rat Fc-gamma receptor mRNA, complete cds /cds=(49,852) /gb=M32062 /gi=204114 /ug=Rn.6050 /len=1341	0.015717579	Fc receptor, IgG, low affinity III
rc_AA892417 EST196220 Rattus norvegicus cDNA, 3 end /clone=RKIAQ20 /clone_end=3 /gb=AA892417 /gi=3019296 /ug=Rn.8427 /len=482	0.0338786	—
rc_AA899935 UI-R-E0-dh-h-10-0-UI.s1 Rattus norvegicus cDNA, 3 end /clone=UI-R-E0-dh-h-10-0-UI /clone_end=3 /gb=AA899935 /gi=3035289 /ug=Rn.15002 /len=407	0.049213936	platelet-activating factor acetylhydrolase alpha 2 subunit (PAF-AH alpha 2)
U77349cds RNU77349 Rattus norvegicus chemokine receptor CCR2 gene, complete cds	0.028435908	chemokine receptor CCR2 gene
D26393exon RATHK2 Rat HK2 gene for type II hexokinase, exon1 and promoter region	0.033448597	hexokinase 2
rc_AA799469 EST188966 Rattus norvegicus cDNA, 3 end /clone=RHEAB40 /clone_end=3 /gb=AA799469 /gi=2862424 /ug=Rn.22776 /len=558	0.046747755	—
X06564 Rat mRNA for 140-kD NCAM polypeptide /cds=(208,2784) /gb=X06564 /gi=56736 /ug=Rn.11283 /len=3170	0.028903862	neural cell adhesion molecule 1
rc_AA800005 EST189502 Rattus norvegicus cDNA, 3 end /clone=RHEAI20 /clone_end=3 /gb=AA800005 /gi=2862960 /ug=Rn.1465 /len=628	0.018338002	CD151 antigen