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wichtiges VERBRAUCHSMATERIAL und größere GERÄTE

Abkürzung	Bezeichnung	Hersteller und Bestellnummer
	Agarose	Invitrogen 15510-019
	nichtessentielle Aminosäuren, flüssig, 100X	Invitrogen 11140-035
BSA	<i>bovine serum albumin</i> , Rinderserumalbumin	Sigma A3311
CEL1	SURVEYOR Mutationsdetektionsset	Transgenomic 706025
	dHPLC-Anlage	Transgenomic WAVE
DAPI	4',6'-Diamidino-2-phenylindoldihydrochlorid	Sigma D 9542
DEPC	Diethylpyrocarbonat	Sigma D 5758
DMEM	Dulbeco's Modifiziertes Eagle Medium, 1X	Biochrom FG0445
DMSO	Dimethylsulfoxid	Sigma D 2650
DNase I	Desoxyribonuklease aus Schweinepankreas	Amersham Pharmacia E2215Y
dNTPs	Desoxyribonukleotide (dATP, dCTP, dGTP, dTTP)	Amersham 27-18(50, 60, 70, 80)-04
ENU	<i>N</i> -Ethyl- <i>N</i> -nitrosoharnstoff	Sigma N 8509
	Ethidiumbromid, 1% (w/v)	Merck 1.11608.0030
Φ	ΦX174/ <i>Bsu</i> RI DNA-Größenstandard	Fermentas #SM0251
FCS	<i>fetal calf serum</i> , fötales Kälberserum	Biochrom S0115
	Fluoreszenzmikroskop	Zeiss Axioplan 2
	Glaskapillaren für Mundpipette	Sigma P 1049
	L-Glutamin, 200mM, 100X	Invitrogen 25030-123
	Haltekapillaren	BioMedical Instruments GC100T-15
HCG	humanes Choriongonadotropin	Sigma C 1063
	Infektionskapillaren	BioMedical Instruments GC100T-15
	Infektionsmikroskop	Leica DMIRB
	Inkubator für die Zellkultur	Heraeus BBD 6220
	Kanülen 30G½	Beckton & Dickinson 305106
	Klebefilm zu Versiegelung von PCR-Platten	ABgene AB-0558
	Kresolrot	Sigma 11,448-0
λ	λ/ <i>Hind</i> III DNA-Größenstandard	Fermentas #SM0101
LIF	<i>leukemia inhibitory factor</i> , ESGRO®	Chemicon ESG1107
	M2-Medium	Sigma M 7167
	M16-Medium	Sigma M 7292
	2-Mercaptoethanol, 50mM, 500X	Invitrogen 31350-010

	2-Methyl-2-butanol	Aldrich 24,048-6
	Mikroinjektor	Eppendorf CellTram Air / Oil
	Mikrokapillaren für Mundpipette	Sigma P 1049
	Mikromanipulator mit elektrischen Joysticks	Eppendorf TransferMan
	Mineralöl	Sigma M 8410
	Mitomycin C	Roche 107409
	Multititerplatten	Biochrom (diverse)
	Primer / Oligonukleotide	Invitek oder MWG Biotech
PBS	phosphatgepufferte Kochsalzlösung, 1X	Invitrogen 14190-169
	Penicillin-Streptomycin, flüssig, 100X	Invitrogen 15140-148
Pfu	DNA-Polymerase von <i>Pyrococcus furiosus</i>	Roman Pawlik (MPI MolGen)
PMSG	Gonadotropin aus Blutserum schwangerer Stuten	Sigma G 4877
	PCR-Maschine	MJ Research PTC-225
	PCR-Platten, 96er Format	ABgene AB-0600
	PCR-Reinigungskit	MoBiTec NC001
	Pronase	Sigma P 8811
	Proteinase K von <i>Tritirachium album limber</i>	Roche 3115879
	5X-Puffer für M-MuLV RT	Promega M5313
M-MuLV RT	RT vom <i>Moloney murine leukaemia virus</i>	Amersham E70456Y
	RNA-Größenstandard	Invitrogen 15620-016
	RNaseZAP®	Ambion 9780
	Sequenziert	Applied Biosystems Prism 3100
	Sterilbank	Heraeus HERA safe
	Sterilfilter, 0,2µm	Sarstedt 83.1826.001
	TA-Klonierungsset	Qiagen 231222
Taq	DNA-Polymerase von <i>Thermus aquaticus</i>	Roman Pawlik (MPI MolGen)
6-TG	6-Thioguanin	Sigma A 4882
TMP	4,5',8-Trimethylpsoralen	Fluka 92895
	2,2,2-Tribromethanol	Aldrich T4,840-2
	TRIZOL®	Invitrogen 15596-018
	Trypsin-EDTA, flüssig, 1X	Invitrogen 25300-096
	UVA-Messgerät	Dr. Höhne UV-Meter
	Wasser	Invitrogen 15230-089
	Wundclips	Becton & Dickinson 427631
	Zellkulturschalen	Nunc (diverse)
	Zellkulturmikroskop	Olympus CK2
	Zycloheximid	Sigma C 7698

PRIMERLISTE

Fragmentname	Fragment (bp) forward-Primer (5'-3')	reverse-Primer (5'-3')
<i>Hprt g.</i> - 72 kb	184 CATTCTTGAGGCTAAAGTGG	CATGCACTTGTGGTGTGCTG
<i>Hprt g.</i> - 32 kb	417 GTGCCAGGGTAATTATGGC	CCTACCACAATGTGACGCC
<i>DXMit22</i> (-5 kb)	236 CCATGCTCACAGGCACAC	CAGGCTGGCTACAGAACAC
<i>Hprt g.exon 1</i>	447 GCTGTTAGACTCATGAGGAGG	GTGGGGCTCTGCTGGAGT
<i>Hprt g.exon 2</i>	119 GCAGATTAGCGATGATGAACC	TTACTAACCTGTCATAATCAGTCC
<i>Hprt g.exon 3</i>	156 GGACTGAAAGACTTGCTCGAG	CAGTCATAGGAATGGATCTATCAC
<i>Hprt g.exon 4</i>	635 AGAAGCAGACACCTGTATGC	ATATGGACTGTGAGGGTTAATGG
<i>Hprt intron 4</i>	528 GACAAAATAACTCTCAGTGGTAGC	ACAACTGCATCCCATTCTATAGG
<i>Hprt g.exon 5</i>	520 ATTGAGTTGGGTTGGGG	CATGCCCTACTGTACCTGGC
<i>Hprt intron 5</i>	484 CTCCCCTCAGCATGATCTTG	ATTCTAGTGTGAGGGTACAC
<i>Hprt g.exon 6</i>	567 GGGACTGACATTACCTCTGC	TGAAGGACCTGAACATCTAGGG
<i>Hprt intron 6</i>	619 GTTAGAGGAGGGTGGGGTC	TTCTCTGGCACATCTCACC
<i>Hprt g.exon 7/8</i>	534 CTTCTATGGGCTGCGAAG	TCAGTCGGGTCAAATTACGAG
<i>Hprt g.exon 9</i>	364 GGTAGAAACCCAGACAACGCTAG	AGCGACAATCTACCAAGAGGG
<i>DXMit23</i> (+ 8 kb)	248 GAGGATCATCAGCAAGCTCC	GCACTCCCTTCTAACACCCC
<i>Hprt g.</i> + 25 kb	641 AAAGTCTCTGGCTCCGG	GGGGACTTAGTACAACCATGG
<i>Hprt g.</i> + 49 kb	332 ACCCTTCCAAAATTCCCC	TCCGAAGAATGATACTTCTACC
<i>Hprt g.</i> + 86 kb	520 CCAGTGTGTTTACACTTAGCCC	CAACATCAACACCTGGCTC
<i>DXMit159</i> (+ 144 kb)	94 ACCTTTCAAGGAAATTCTGGC	TTAATTGCAGTCATGATCCG
<i>Hprt g.</i> + 216 kb	203 CCTACCCCTCGCATCTG	AGCTGCTCTGGATTAGCAT
<i>DXMit68</i> (+ 296 kb)	128 TCCTTGGCCTCCTGCATAT	TGTTCTACAATGAGCCTCATAGG
 <i>Oligo-dT</i>	TTTTTTTTTTTTTTTT	
 <i>Hprt CDS</i>	593 CGTCGTGATTAGCGATGATG	CGTGATTCAAATCCCTGAAGTAC
<i>Hprt UTR</i>	797 CTTACCTCACTGCTTCCGG	CTGGCAACATCAACAGGACTC
<i>Hprt dHPLC 1</i>	336 CGTCGTGATTAGCGATGATG	CCACCAATAACTTTATGTCCC
<i>Hprt dHPLC 2</i>	297 GGGACATAAAAGTTATGGTGG	CGTGATTCAAATCCCTGAAGTAC
<i>Hprt poison ex 3 fwd</i>	- CAAGGGGGCTATAAGTTCTTGG	 CAAAGAACTTATAGCCCCCTTG
<i>Hprt poison ex 3 rev</i>	-	CGTGATTCAAATCCCTGAAGTAC
<i>Hprt skip ex 3</i>	493-184= 309 CTGATTATGGACAGAATG	
 <i>Kit 1.H. außen</i>	1340 CTGCTCTGCGTCTGTTGGTC	GTGGGCTCCGGGAATCCCTCTG
<i>Kit 2.H. außen</i>	1604 CGTACGACAGGCTATAATGGC	CACGGAATGGTCCACCAACAC
<i>Kit 1.H. innen</i>	1234 CCTGCTCCGTGCCAGACAG	GCCATTATGAGCCTGCTGTACG
<i>Kit 2.H. innen</i>	1527 CAGAGGGATTCCCGGAGCCAC	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex 2 alt</i>	1227-273= 954 CGTGGCCAGACAGATCTGCC	GCCATTATGAGCCTGCTGTACG
<i>Kit skip ex 2 neu</i>	1231-273= 958 GCTCCGTGCCAGACAGATCC	GCCATTATGAGCCTGCTGTACG
<i>Kit skip ex 3 alt</i>	955-282= 673 CGTGTGTTAGAGCCATCAAGG	GCCATTATGAGCCTGCTGTACG
<i>Kit skip ex 3 neu</i>	962-282= 680 CTATTTACGTGTTGTTAGAGCCATC	GCCATTATGAGCCTGCTGTACG
<i>Kit skip ex 4</i>	679-137= 542 ACCCTCAAAGTGGGGCAGCCTC	GCCATTATGAGCCTGCTGTACG
<i>Kit skip ex 5</i>	909-175= 734 CCTGCTCCGTGCCAGACAG	GAGATGTTGATGAATCCTTTCTGAG
<i>Kit skip ex 6</i>	1099-190= 909 CCTGCTCCGTGCCAGACAG	CAGGCGAAGTTGGTACATATCTAC
<i>Kit skip ex 7</i>	1217-116=1101 CCTGCTCCGTGCCAGACAG	CGTACGTCAAGGATTCTGGTTGCTG
<i>Kit skip ex 9</i>	1496-182=1310 GTATTTTGACAGGAGCAGAGCAAAGAGC	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex10</i>	372-107= 265 CAGAGGGATTCCCGGAGCCAC	TCCATTGTAACATACATGGGTTCTT
<i>Kit skip ex11</i>	1202-128=1074 GTGCTCACCTACAAATATTGAGAAAG	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex12</i>	1074-104= 970 CAGAAACAGGCTGAGTTGGCAAG	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex13</i>	970-111= 859 GTGCCGTGAAGATGCTAACACGGC	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex14</i>	856-151= 705 GGCCCATGCACGGTGGGAGTGC	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex15</i>	707- 89= 618 GCACTCACGGAGCCTCCTGACTC	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex16</i>	617-128= 489 GAGGAGATCCCGAAGAATAGTG	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex17</i>	490-123= 367 GCGTCCCTCGCCTCCAAGAATGCAC	GGTTGCAGTTTGCCAAGTTGG
<i>Kit skip ex18</i>	1313-112=1201 CAGAGGGATTCCCGGAGCCAC	CCCTGGTAGGGCTGCTTCATTTC
<i>Kit skip ex19</i>	1415-100=1315 CAGAGGGATTCCCGGAGCCAC	GCAAGTCTCATGACGTACACTAAG
<i>Kit skip ex20</i>	1522-106=1416 CAGAGGGATTCCCGGAGCCAC	CAGTTGCCAAGTTGGAGTAAATATTTC
 <i>Kit in18 außen</i>	308 GTGGATGGCACAGAGAGCAT	AGGCTGTGAGTCCTACATTTCG
<i>Kit in18 innen</i>	270 CAGCTCGTGTACACATTGAA	TTACATTCCGGCAGGCGCG

LEBENSLAUF

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Familienstand	verheiratet, 1 Kind

6/2001 bis 6/2004

Doktorarbeit bei Dr. habil. H. Himmelbauer am Max-Planck-Institut für Molekulare Genetik in Berlin, Abteilung Prof. H. Lehrach, über die chemische Mutagenese embryonaler Stammzellen der Maus

11/2000 bis 5/2001

Arbeit bei Dr. S. Reumann / Prof. H. Heldt an der Universität Göttingen über das Proteom von Glyoxysomen in *Ricinus communis* (abgebrochene Promotion)

10/1999 bis 4/2000

Diplomarbeit bei Dr. K. Denyer / Prof. A. Smith am John Innes Centre in Norwich, England:
Investigating the molecular basis of the mutation responsible for the low-starch phenotype of Risø 13 barley

10/1996 bis 10/2000

Studium der Biochemie an der Universität Potsdam, Abschluss: Diplom

8/1995 bis 8/1996

Zivildienst in Bonn (individuelle Schwerstbehindertenbetreuung)

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Gymnasium in Bonn, Abschluss: Abitur

1982 bis 1986

Grundschule in Bonn

VERÖFFENTLICHUNGEN aus dieser Arbeit

schriftliche Publikationen (Stand 2/2005)

Greber, B., Lehrach, H. und Himmelbauer, H. (2004). Mouse splice mutant generation from embryonic stem cells - a gene-driven approach. *Genomics, in press.*

Greber, B., Lehrach, H. und Himmelbauer, H. (2004). Comparison of PCR-based mutation detection methods and application for identification of mouse *Sult1a1* mutant ES cell clones using pooled templates. *Hum Mutat, in press.*

Greber, B., Lehrach, H. und Himmelbauer, H. (2003). Characterization of trimethylpsoralen as a mutagen for mouse embryonic stem cells. *Mutat Res 525*, 67-76

Vorträge

Dresden, 28 - 30.3.2004

5th VW Stiftung Meeting on Conditional Mutagenesis & Mouse Models

Capri, 12. - 15.10.2002

15th IIGB Meeting - From Genome Sequence to Functional analysis and Medical Applications

Posterpräsentationen

Berlin, 4. - 7.4.2004 *

Human Genome Meeting

Braunschweig, 9. - 12.11.2003

International Mouse Genome Conference

Heidelberg, 3. - 7.9.2003 *

EMBL Meeting on Mouse Molecular Genetics

Berlin, 17. - 19.11.2002 *

Symposium of the NGFN and DHGP

Shanghai, 14. - 17.4.2002

Human Genome Meeting

Leipzig, 29.9. - 2.10.2002 *

Jahrestagung der Deutschen Gesellschaft für Humangenetik

Cold Spring Harbour, 28.8. - 1.9.2002

CSH Meeting on Mouse Molecular Genetics

* mit eigener Beteiligung