

Materials List for:

Forward Genetic Approach to Uncover Stress Resistance Genes in Mice — A High-throughput Screen in ES Cells

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Materials

Name	Company	Catalog Number	Comments
Vector			
PB-UPA			
mPBase			
mPBase ^{Puro}			
Tissue Culture			
500-ml Stericup filters	EMD Millipore	SCGPU05RE	
250-ml Stericup filters	EMD Millipore	SCGPU02RE	
50-ml Steriflip-GV filters	EMD Millipore	SE1M179M6	
KO DMEM	Life Technologies	10829-018	
DMEM	Sigma-Aldrich	D6429	
FBS	Tissue Culture Biologicals	104	
Heat Inactivated FBS	Sigma-Aldrich	F4135-500	
LIF	EMD Millipore	ESG1107	
Non-essential Amino Acids	Life Technologies	11140-050	
GlutaMAX	Life Technologies	35050-061	
Pen/Strep	Life Technologies	15140148	
β-Mercaptoethanol	Life Technologies	21985-023	
Methyl Viologen dichloride (Paraquat)	Sigma-Aldrich	856177	
Dimethyl Sulphoxide Hybri-MAX	Sigma-Aldrich	D2650	
EmbryoMAX 0.1% gelatin	EMD Millipore	ES006B	
DPBS/Modified	HyClone	SH30028.02	
0.25% Trypsin-EDTA	Life Technologies	25200-056	
T25 Flask	Corning	353108	
T75 flask	Corning	353135	
100-mm plate	Corning	353003	
150-mm plate	Corning	430599	
96-well plate	Corning	3585	
96-well U-bottom plate	Corning	3799	
24-well plate	Corning	3526	
50-ml reservoir	Corning	4870	
15-ml tubes	VWR International, LLC	82050-276	
Primary Mouse Embryonic Fibroblasts	EMD Millipore	PMEF-NL	

DR4 Mouse Embryonic Fibroblasts	Applied StemCell	ASF-1001	
Mitomycin C	Fisher BioReagents	BP25312	
Geneticin (G418)	Life Technologies	11811-023	
Doxycycline	Fisher BioReagents	BP26531	
Cryotubes	Thermo Scientific	377267	
Centrifuge	Eppendorf	Centrifuge 5702	
TC10 cell counter	Bio-Rad		
Counting Slides (for TC10)	Bio-Rad	1450011	
Electroporation			
Gene Pulser Xcell	Bio-Rad	1652611	
Gene Pulser Cuvettes (4 mm gap)	Bio-Rad	1652088	
Molecular Biology			
Thermal Cycler	Eppendorf	Mastercycler ep Gradient S	
Puregene Core kit B	Qiagen	158745	
Topo-TA Cloning kit	Life Technologies	450030	
High Capacity cDNA synthesis kit	Applied Biosystems	4368814	
NaCl	Fisher BioReagents	BP358-212	
100% ethanol	Decon Laboratories, Inc.	2716	
Double Processed Tissue Culture Water	Sigma-Aldrich	W3500	
Sau3A1	New England BioLabs	R0169L	
T4 DNA Ligase	New England BioLabs	M0202T	
EcoRV	New England BioLabs	R3195S	
96-well Lysis Buffer (Ramires-Solis et al. 1992)			
Trizma Base	Sigma-Aldrich	T1503	
Hydrochloric Acid	Fisher BioReagents	A144-212	
EDTA	Sigma-Aldrich	E5134	
N-Lauroylsarcosine sodium salt	Sigma-Aldrich	L5777	
Proteinase-K	Fisher BioReagents	BP1700	
Electrophoresis			
Mini-Sub Cell GT	Bio-Rad	170-4469EDU	
LE Agarose	GeneMate	E3120500	
Ethidium Bromide	Fisher BioReagents	BP1302	
100 BP DNA Ladder	New England BioLabs	N3231S	
1 Kb DNA Ladder	New England BioLabs	N3232S	
2-log DNA Ladder	New England BioLabs	N3200L	