

Supplementary Table 7. Biosets highly correlated with the hippocampal transcriptome of Shn-2 KO mice.

Rank in p-value	Group	Public id	Bioset Name	Correlation	Common Genes	P value
1	Tumor	GSE21687	Ependymoma cell lines _vs_ primary tumors	-	993	1.10E-48
2	Aging	GSE11528	Whole brain from Mus musculus – P56 young adult mice _vs_ P0 newborn mice	+	756	1.00E-44
3	Relative gene expression	GSE4734	C57BL_6J hippocampus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	1.40E-42
4	Aging	GSE11528	Whole brain from Mus musculus – P14 mice pups _vs_ P0 newborn mice	+	682	3.40E-41
5	Aging	GSE8150	Neocortex from aged mice treated with alpha- and gamma-tocopherol _vs_ young untreated mice	+	447	1.90E-40
6	Aging	GSE8150	Neocortex from aged mice treated with alpha-tocopherol _vs_ young untreated mice	+	448	2.90E-40
7	Relative gene expression	GSE4734	C3H_HeJ hippocampus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	6.60E-40
8	Aging	GSE11528	Whole brain from Mus spretus – P14 mice pups _vs_ P0 newborn mice	+	652	1.10E-38
9	Aging	GSE11528	Whole brain from Mus spretus – P56 young adult mice _vs_ P0 newborn mice	+	716	2.80E-38
10	Genetic modification	E-MEXP-962	Alpha-CaMKII HKO mice _vs_ wild type	+	211	1.40E-37
11	Aging	GSE8150	Neocortex from aged mice _vs_ young untreated mice	+	405	3.10E-36
12	Tumor	GSE6463	Granule neuron precursors from Ink4c-p53- mice overexpressing Cyclin D1 _vs_ not overexpressing	+	349	4.70E-36
13	Aging	GSE13120	Mouse neocortex 30mo _vs_ 5mo	+	396	2.20E-35
14	Aging	GSE12454	Forebrain from wildtype C57BLx129 mice – P0.5 _vs_ E13.5	+	689	1.20E-34
15	Comparison of tissues	GSE8044	Mus musculus brown adipose tissue _vs_ white adipose tissue	-	681	1.20E-33
16	Aging	GSE20547	Cerebellum of wildtype female mice 20–22 mo _vs_ 6 mo old	+	464	6.90E-33
17	TRAP	GSE13379	TRAP astrocyte RNA from mouse cortex _vs_ unbound RNA	-	836	6.90E-33
18	Aging	GSE19677	Whole striatum of YAC128 transgenic Huntington's model mice – 24mo old _vs_ 12mo old_GPL1261	+	777	1.50E-32
19	Relative gene expression	GSE4734	FVB_NJ hippocampus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	2.20E-32
20	Relative gene expression	GSE4734	DBA_2J hippocampus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	2.50E-32
21	Aging	GSE12454	Forebrain from Atrx-null C57BLx129 mice – P0.5 _vs_ E13.5	+	864	1.10E-31
22	TRAP	GSE13379	TRAP cholinergic neuronal RNA from mouse corpus striatum _vs_ unbound RNA	-	707	3.70E-31
23	Comparison of tissues	GSE13394	Drd1a subclass of medium spiny neurons from mouse striatum _vs_ Purkinje neurons from cerebellum	+	818	6.40E-31
24	Comparison of tissues	GSE13394	Drd2 subclass of medium spiny neurons from mouse striatum _vs_ Purkinje neurons from cerebellum	+	829	9.20E-31
25	Comparison of tissues	GSE19534	Neural tissues from wildtype 21mo post-natal mice – striata _vs_ cerebella	+	890	2.00E-30
26	Relative gene expression	GSE4734	A_J hippocampus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	6.80E-30
27	Neurodegeneration	GSE10263	Striatum from R6-2 transgenic mice _vs_ WT_GPL1261	-	411	6.90E-30
28	Relative gene expression	GSE4734	129S6_SvEvTac hippocampus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	1.80E-29
29	Comparison of tissues	GSE19534	Neural tissues from wildtype 6mo post-natal mice – striata _vs_ cerebella	+	778	4.80E-29
30	Aging	GSE20954	Lung of ICR strain postnatal day 2 _vs_ embryonic day 12	+	646	1.70E-28
31	Drug treatment	GSE22307	Colon tissue from mice treated with 3 percent dextran sodium sulfate (DSS) for 4d _vs_ untreated	+	483	2.30E-28

32 Comparison of tissues	GSE19534	Neural tissues from SNCA KO 6mo post-natal mice – striata _vs_ cerebella	+	789	3.40E-28
33 Aging	GSE20954	Lung of ICR strain postnatal day 10 _vs_ embryonic day 12	+	563	9.10E-28
34 TRAP	GSE13379	TRAP cholinergic neuronal RNA from mouse basal forebrain _vs_ unbound RNA	-	758	1.10E-27
35 Comparison of tissues	GSE18281	Peri-medullary thymic cortex microdissected from C57BL6 mice _vs_ whole thymic medulla	-	917	1.40E-27
36 Relative gene expression	GSE1479	E14.5 atrial chamber of heart – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	1.50E-27
37 Aging	GSE20547	Cerebellum of SNCA-A53T-overexpressing female mice (TgB) 20–22 mo _vs_ 6 mo old	+	419	2.00E-27
38 Comparison of tissues	GSE19534	Neural tissues from SNCA KO 21mo post-natal mice – striata _vs_ cerebella	+	909	2.10E-27
39 TRAP	GSE13379	TRAP Pnoc+ neuronal RNA from mouse cerebellum _vs_ unbound RNA	-	438	3.00E-27
40 Genetic modification	GSE19402	Hippocampus of Camk2a-Cre driven G9a KO mice _vs_ GLP KO mice	+	555	4.00E-27
41 TRAP	GSE13379	TRAP mixed oligodendroglia RNA from mouse cortex _vs_ unbound RNA	-	562	6.80E-27
42 Comparison of tissues	GSE7897	Tissue from mice younger than 76d– Lymphomas of Eu-Myc mice _vs_ wild type lymph node	-	793	9.10E-27
43 TRAP	GSE13379	TRAP Purkinje neuronal RNA from mouse cerebellum _vs_ unbound RNA	-	947	1.00E-26
44 Aging	GSE13799	Hippocampus from spatial memory unimpaired aged animals _vs_ young	+	149	1.40E-26
45 TRAP	GSE13379	TRAP Bergmann glia RNA from mouse cerebellum _vs_ unbound RNA	-	846	2.50E-26
46 Neurodegeneration	GSE3621	Brain from 18wk old mice – R6/1 Huntington's model _vs_ wildtype	-	178	3.90E-26
47 Neurodegeneration	GSE3621	Brain from 22wk old mice – R6/1 Huntington's model _vs_ wildtype	-	204	2.50E-25
48 Drug treatment	GSE22307	Colon tissue from mice treated with 3 percent dextran sodium sulfate (DSS) for 6d _vs_ untreated	+	559	2.80E-25
49 Aging	GSE8091	Heads from embryonic mice– E13.5 _vs_ E9.5	+	986	3.90E-25
50 Aging	GSE20547	Cerebellum of SNCA-A53T-overexpressing female mice (TgA) 20–22 mo _vs_ 6 mo old	+	427	4.20E-25
51 Neurodegeneration	GSE23182	Hippocampal tissue of mice treated with 500ug/kg LPS 18wk after ME7 infection _vs_ uninfected	+	335	5.40E-25
52 Relative gene expression	GSE1479	E12.5 heart ventricles – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	6.60E-25
53 Comparison of tissues	GSE13563	Protective calvarial bone of skull _vs_ weight bearing mandibular bone	+	358	8.20E-25
54 Genetic modification	GSE10263	Striatum from CHL2 knock-in mice _vs_ WT_GPL1261	-	415	1.20E-24
55 Aging	GSE18597	Spinal cord SOD1 G93A mutant – 98 day old _vs_ 28 day old	+	445	1.60E-24
56 Aging	GSE10000	Aorta of ApoE null mice – 78wk old _vs_ 6wk old_GPL1261	+	556	5.30E-24
57 Genetic modification	GSE7897	Early onset Lymphoma from Eホシ-Myc transgenic mice _vs_ normal wild type lymph node	-	770	5.70E-24
58 Injury	GSE5296	Spinal cord below impact site 72h after injury _vs_ naive	+	349	5.70E-24
59 Aging	GSE19677	Whole striatum of wildtype mice – 24mo old _vs_ 12mo old_GPL1261	+	681	7.30E-24
60 Relative gene expression	GSE1479	E16.5 atrial chamber of heart – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	7.60E-24
61 Aging	GSE20954	Lung of ICR strain postnatal day 30 _vs_ embryonic day 12	+	689	7.70E-24
62 Genetic modification	GSE8396	Liver from mice Wy14643 treated 6hr – PPARα-null _vs_ wildtype	+	450	1.00E-23
63 Comparison of tissues	GSE7897	Late onset Lymphoma from Eu-Myc transgenic mice _vs_ normal wild type lymph node	-	739	1.10E-23
64 Treatment	GSE18341	Lungs of 16wk adult C57BL6 mice + mechanical ventilation for 2hr _vs_ untreated 2hr	-	465	1.30E-23
65 Genetic modification	GSE17511	Skin basal cells from mouse overexpressing tissue-specific IKK-beta _vs_ wildtype	+	307	1.60E-23
66 Treatment	GSE13432	White adipose tissue of mouse housed at 4 degrees 5wk _vs_ room temperature	-	473	1.90E-23
67 Injury	GSE5296	Spinal cord below impact site 28d after injury _vs_ sham-injury	+	154	2.00E-23

68	Relative gene expression	GSE1479	E18.5 atrial chamber of heart – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	2.20E-23
69	Relative gene expression	GSE2882	Cingulate cortex_G42_GABA neurons homogenate – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	929	2.40E-23
70	Injury	GSE5296	Spinal cord above impact site 72h after injury _vs_ naive	+	320	2.60E-23
71	Genetic modification	GSE18597	Spinal cord from 112 day old mice – SOD1 G93A mutant _vs_ wildtype	+	378	3.20E-23
72	Relative gene expression	GSE4734	FVB_NJ pituitary gland – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	4.00E-23
73	Comparison of tissues	GSE5038	Wildtype mouse tissue – motor neurons _vs_ total spinal cord	-	931	4.50E-23
74	Drug treatment	GSE6476	Hippocampus from mice treated 21d with 18mg/kg/d fluoxetine _vs_ untreated	+	95	5.50E-23
75	Relative gene expression	GSE4734	C3H_HeJ periaqueductal gray – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	5.60E-23
76	TRAP	GSE13394	Purkinje neurons from mouse cerebellums – TRAP purified _vs_ unbound RNA	-	850	7.40E-23
77	Comparison of tissues	GSE18281	Medullary thymocytes (CD3hi CD45+) FACs from C57BL6 mice _vs_ whole medulla of thymus	-	745	9.80E-23
78	Genetic modification	GSE8396	Liver from mice C22-6 treated 6hr – PPAR $\alpha$ -null _vs_ wildtype	+	316	1.80E-22
79	Tumor	GSE22406	Mammary tumors of mice expressing inducible c-myc – primary _vs_ recurrent after deinduction	+	531	2.10E-22
80	Aging	GSE10000	Aorta of ApoE null mice – 32wk old _vs_ 6wk old_GPL1261	+	367	2.60E-22
81	Treatment	GSE15155	Satellite muscle cells from adult mice – cultured 3d activated _vs_ fresh isolated quiescent cells	-	753	3.20E-22
82	Genetic modification	GSE16585	Retina of 28d old mice – Nrl overexpression and Rorb KO _vs_ wildtype	+	631	4.40E-22
83	Aging	GSE13799	Hippocampus from spatial memory impaired aged animals _vs_ unimpaired young	+	223	5.10E-22
84	Comparison of tissues	GSE6383	E18.5 small intestine- epithelium _vs_ mesenchyme	-	797	5.30E-22
85	Aging	GSE4818	Testes post natal day2 _vs_ day11	+	676	6.50E-22
86	Drug treatment	GSE12413	Heart of C57BL mice treated 14d with 120ug/g/day isoproterenol _vs_ untreated	+	699	7.10E-22
87	Aging	GSE5333	Epididymus gd18 _vs_ gd12	+	436	8.90E-22
88	Genetic modification	GSE18597	Spinal cord from 98 day old mice – SOD1 G93A mutant _vs_ wildtype	+	141	9.20E-22
89	Treatment	GSE7699	Liver from mice on ketogenic diet _vs_ chow	+	326	1.20E-21
90	Relative gene expression	GSE4734	129S6_SvEvTac periaqueductal gray – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	1.50E-21
91	Comparison of tissues	GSE18281	Whole medulla of thymus from C57Bl6 mice _vs_ whole thymic cortex	+	788	2.00E-21
92	Aging	GSE15209	Neural stem cells derived from the foetal cortex _vs_ normal brain cortex	-	770	2.00E-21
93	TRAP	GSE13394	Drd1a subclass of medium spiny neurons from mouse striatum – TRAP purified _vs_ unbound RNA	+	439	2.60E-21
94	Aging	GSE20954	Lung of ICR strain embryonic day 18 _vs_ embryonic day 12	+	569	2.70E-21
95	Injury	GSE5296	Spinal cord above impact site 24h after injury _vs_ naive	+	246	2.80E-21
96	Drug treatment	GSE13044	Fetal livers from timed pregnant mice exposed gestation days 1-17 – 10mg/kg/day PFOA _vs_ vehicle	-	368	3.50E-21
97	Comparison of tissues	GSE6933	Mouse multipotent adult progenitor cells – clone 3 _vs_ clone 2	+	742	4.20E-21
98	Comparison of tissues	GSE23782	Skin from 4-OHT treated K14NICDER transgenic mice expressing Notch – epidermis _vs_ whole skin	-	587	5.00E-21
99	Comparison of tissues	GSE7685	Mouse tibiae Zone III of growth plate _vs_ Zone I	+	606	5.70E-21
100	Aging	E-MEXP-1504	Liver from wild type mouse aged 130 weeks old _vs_ young 13 weeks old	+	166	5.90E-21
101	Comparison of tissues	GSE8024	Mouse embryonic fibroblasts _vs_ murine neural precursor cells differentiated from ES cells	+	675	6.70E-21
102	Comparison of tissues	GSE8034	E14 cortex glial cells- GFAP-GFP High _vs_ low	-	405	7.90E-21

103 Comparison of tissues	GSE23782	Skin from 4-OHT treated K14NICDER transgenic mice expressing Notch – epidermis _vs_ dermis	-	450	8.70E-21
104 Aging	GSE3231	V6.5 embryonic cells differentiating to embryoid bodies 14d _vs_ 0hr	+	515	9.30E-21
105 Aging	GSE10965	Retinal Pigmental epithelium and Choroid – 4mo old_CHGN vs 26mo old	-	400	1.10E-20
106 Comparison of tissues	GSE19979	P7 bladder epithelium from Theiler stage 6 mice – uroplakin positive _vs_ negative	-	528	1.30E-20
107 TRAP	GSE13379	TRAP cholinergic neuronal RNA from mouse spinal cord _vs_ unbound RNA	-	762	1.90E-20
108 Treatment	GSE11679	CA1 region of hippocampus from postnatally handled mice _vs_ non handled mice	+	688	2.40E-20
109 Drug treatment	GSE13044	Fetal livers from timed pregnant mice exposed gestation days 1–17 – 5mg/kg/day PFOA _vs_ vehicle	-	368	2.60E-20
110 Genetic modification	GSE8396	Liver from mice fenofibrate treated 6hr – PPAR $\alpha$ -null _vs_ wildtype	+	344	2.80E-20
111 Relative gene expression	GSE4734	C57BL/6J pituitary gland – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	3.00E-20
112 Treatment	GSE13071	Knee joint synovium – collagen induced arthritis moderate inflammation _vs_ healthy control	+	767	3.10E-20
113 Genetic modification	GSE7897	Tissue from 253–649d old mice – Lymphomas of Eu-Myc mice _vs_ wild type normal lymph node	-	643	3.80E-20
114 Comparison of tissues	GSE6933	Mouse multipotent adult progenitor cells – clone 3 _vs_ clone 1	+	797	4.30E-20
115 Aging	GSE15452	Lung of wildtype mice – 28d old _vs_ 1d old	+	489	4.60E-20
116 Infection	GSE8966	Liver from SCID mice + Arkansas strain E. chaffeensis 15d _vs_ mock infected	+	389	4.70E-20
117 Genetic modification	GSE7020	Spleen from Nix KO mice _vs_ WT	-	504	5.40E-20
118 Comparison of tissues	GSE6933	Mouse multipotent adult progenitor cells _vs_ marrow stromal cells	-	601	6.60E-20
119 Treatment	GSE8790	Lungs of AJ mice + 8d cigarette smoke at 5hr per day _vs_ air	+	635	7.50E-20
120 Comparison of tissues	GSE13071	Knee joint synovium – collagen induced arthritis mild inflammation _vs_ no inflammation	+	472	8.20E-20
121 Comparison of tissues	GSE8024	Mouse embryonic fibroblasts _vs_ murine embryonic stem cells	+	815	1.20E-19
122 Infection	GSE8966	Liver from SCID mice + Wakulla strain E. chaffeensis 15d _vs_ mock infected	+	615	1.20E-19
123 Comparison of tissues	GSE13394	Drd1a subclass of medium spiny neurons from mouse striatum _vs_ motor neurons from brainstem	+	772	1.30E-19
124 Genetic modification	GSE19402	Hypothalamus of Camk2a-Cre driven G9a KO mice _vs_ GLP KO mice	+	581	1.30E-19
125 Aging	GSE5333	Epididymus gd16 _vs_ gd12	+	424	1.50E-19
126 Genetic modification	GSE17478	Left ventricle of mice exposed to particulate matter – dominant negative CREB _vs_ wildtype	+	323	1.50E-19
127 Genetic modification	GSE15541	Bone marrow transformed with NUP98-HOXD13 + wildtype MEIS1 overexpression _vs_ control	-	458	1.60E-19
128 Relative gene expression	GSE1806	Diaphragm_8wk – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	2.00E-19
129 Comparison of tissues	GSE3822	E11.5 embryonic metanephric mesenchyme _vs_ ureteric bud	+	548	2.10E-19
130 Comparison of tissues	GSE13071	Knee joint synovium – collagen induced arthritis severe inflammation _vs_ no inflammation	+	693	2.20E-19
131 Genetic modification	GSE9355	Sorted mammary tumor from RAG2 KO mice _vs_ WT hyperplastic mammary cells	-	293	3.10E-19
132 Treatment	GSE4786	Cochlea from calorie restricted mice _vs_ middle aged control	+	619	3.30E-19
133 Aging	GSE11186	Dorsal skin of mouse during second postnatal hair growth cycle – 29d postnatal _vs_ 23d postnatal	-	504	3.50E-19
134 Genetic modification	GSE14242	Long bones from 12d old Hyp mutant mice – Phex mutation _vs_ wildtype	+	284	3.70E-19
135 Injury	GSE5296	Spinal cord below impact site 28d after injury _vs_ naive	+	271	4.30E-19
136 Comparison of tissues	GSE13071	Knee joint synovium – collagen induced arthritis severe inflammation _vs_ healthy control	+	718	4.40E-19
137 Comparison of tissues	GSE9763	Transformed glial progenitors cells – postnats _vs_ embryonic progenitors	+	875	6.40E-19
138 Aging	GSE8091	Heads from embryonic mice – E11.5 _vs_ E9.5	+	893	7.30E-19
139 Comparison of tissues	GSE13071	Knee joint synovium – collagen induced arthritis moderate inflammation _vs_ no inflammation	+	695	7.40E-19

140	Relative gene expression	GSE4734	129S6_SvEvTac hypothalamus – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	1.00E-18
141	Neurodegeneration	GSE23182	Hippocampal tissue of mice treated with 500ug/kg saline 18wk after ME7 infection _vs_ uninfected	+	427	1.00E-18
142	Genetic modification	GSE15541	Bone marrow transformed with NUP98-HOXD13 + MEIS1-homeodomain deletion overexpression _vs_ control	-	527	1.10E-18
143	TRAP	GSE13379	TRAP Drd2+ medium spiny neuronal RNA from mouse striatum _vs_ unbound RNA	+	454	1.20E-18
144	Aging	E-MEXP-454	Genital ridges from Sf1-eGFP transgenic male mice E13.5 _vs_ E10.5	+	468	1.20E-18
145	Treatment	GSE23006	Mucosa of tongue from Balb-c mice – 5d post-wound _vs_ unwounded	+	494	1.30E-18
146	Aging	GSE20547	Cerebellum of SNCA-A53T-overexpressing female mice 20–22 mo _vs_ 6 mo old	+	407	1.50E-18
147	Injury	GSE5296	Spinal cord impact site 7d after injury _vs_ sham-injury	+	599	1.80E-18
148	Infection	GSE5555	Lungs- Nippostrongylus brasiliensis infected _vs_ uninfected mice	+	475	1.90E-18
149	Comparison of tissues	GSE6933	Mouse marrow stromal cells _vs_ embryonic stem cells	+	803	2.00E-18
150	Genetic modification	GSE7676	E12.5 placenta- pcdh12 KO _vs_ wildtype	+	326	3.00E-18
151	Neurodegeneration	GSE3621	Brain from 27wk old mice – R6/1 Huntington's model _vs_ wildtype	-	282	3.10E-18
152	Drug treatment		Splenic macrophages from aged mice – treated 6hr with 1ug per mL LPS _vs_ untreated	-	496	3.30E-18
153	Comparison of tissues	GSE3483	Mouse satellite cells in activated state _vs_ non myogenic cells	-	548	3.40E-18
154	Comparison of tissues	GSE15209	Oligoastrocytoma _vs_ normal brain cortex	-	658	3.50E-18
155	Genetic modification	GSE2372	Aorta of 32 week old mice – ApoE KO _vs_ wildtype	+	181	4.00E-18
156	Relative gene expression	GSE1479	E10.5 whole heart – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	4.50E-18
157	Injury	GSE7404	WBC from spleen after burn injury sham at 1d _vs_ 2hr	+	307	4.50E-18
158	Aging	GSE3501	Mammary glands from mice overexpressing LH and erbB2 – 10wk _vs_ 5wk	-	503	4.70E-18
159	Aging	E-MEXP-878	Mice hippocampal neurons differentiating for 16d _vs_ 0.25d	+	675	5.00E-18
160	Genetic modification	GSE11897	P0.5 ovarian tissue from LHX8 null mice _vs_ WT_GPL1261	+	514	7.10E-18
161	Treatment	GSE13432	White adipose tissue of mouse housed at 4 degrees 1wk _vs_ room temperature	-	537	7.80E-18
162	Neurodegeneration	E-MEXP-1005	Brain from ME7-inoculated mice after 150d _vs_ not inoculated	+	190	7.90E-18
163	Genetic modification	GSE15303	Oligodendrocytes Myelin-gene Regulatory Factor heterozygote _vs_ oligodendrocyte progenitors	+	592	8.30E-18
164	Relative gene expression	GSE4734	129S6_SvEvTac pituitary gland – relative gene expression	-	1411	8.40E-18
165	Drug treatment	GSE7793	Kidney of mice treated IP 7d with vancomycin 400mg-kg-d _vs_ saline	+	861	9.40E-18
166	Not categorized yet	GSE15267	Pluripotent cells induced from serum-free fibroblast + Oct4 +Sox2 +Klf4 _vs_ serum-free MEFs	-	409	9.80E-18
167	Aging	GSE2154	Chondrocyte micromass cultures from E11.5 limb buds differentiated for 12d _vs_ 3d	+	387	1.10E-17
168	Genetic modification	GSE8156	Untreated granulosa cell tumor of Smad8+/- Smad1 Smad5 flox KO _vs_ WT granulosa cells+PMSG	+	409	1.30E-17
169	TRAP	GSE13379	TRAP Drd1+ medium spiny neuronal RNA from mouse striatum _vs_ unbound RNA	+	354	1.40E-17
170	Infection	GSE8966	Liver from SCID mice + Liberty strain <i>E. chaffeensis</i> 15d _vs_ mock infected	+	398	1.40E-17
171	Tumor	GSE6482	Kaposi-like tumor _vs_ mECK36 cells post KSHV/Bac36 transfection	+	252	1.40E-17
172	Aging	GSE2297	Female brain 8-wk _CHGN vs 1 wk	+	272	1.60E-17
173	Infection	GSE17509	Splenocytes CD45 heterozygotes expressing 62% normal levels of CD45 + EBOV 9d _vs_ uninfected	+	667	1.80E-17
174	Genetic modification	GSE12073	Pancreatic islets of NOD Rats- insulin promoter driven AIRE expression _vs_ nontransgenic islets	+	301	1.90E-17
175	Not categorized yet	GSE5350	Ambion human brain reference RNA _vs_ Stratagene universal reference RNA_Affy platform_GPL570	+	885	1.90E-17
176	Injury	E-MEXP-703	Skeletal muscle 12d post cardiotxin injury in CnAa transgenic mice _vs_ untreated	+	313	1.90E-17

177	Infection	E-MEXP-1190	Spleen from C57BL-6 mice <i>T. congolense</i> -infected for 9d _vs_ uninfected	-	463	2.10E-17
178	Genetic modification	GSE10000	Aorta of 32wk old mice - ApoE null _vs_ wildtype_GPL1261	+	197	2.20E-17
179	Drug treatment	GSE12466	CD3+ T-cells from C57BL mouse + 1 mg/ml anti-CD3 + 3 mg/ml anti/CD28 _vs_ untreated	-	402	2.20E-17
180	Drug treatment	GSE12333	Embryoid bodies derived from D3 ES cell line + retinoic acid 10d _vs_ control	-	362	2.70E-17
181	Infection	GSE7814	Brain of cerebral-malaria-susceptible mice infected for 6 days _vs_ uninfected	+	208	3.20E-17
182	Aging	GSE11186	Dorsal skin of mouse during second postnatal hair growth cycle - 44d postnatal _vs_ 23d postnatal	+	437	3.30E-17
183	Drug treatment	GSE18341	Lungs of 16wk adult C57BL6 mice + LPS 30min + mechanical ventilation 2hr _vs_ untreated 2hr	-	510	4.40E-17
184	Comparison of tissues	GSE9763	Postnatal glial progenitor cells- transformed _vs_ normal	+	673	5.30E-17
185	Genetic modification	GSE10784	Hippocampus from Df(16)A+ mouse model of human 22q11 microdeletion syndrome _vs_ wildtype	+	144	5.40E-17
186	Genetic modification	GSE15303	Oligodendrocytes Myelin-gene Regulatory Factor conditional KO _vs_ oligodendrocyte progenitors	+	601	5.50E-17
187	Drug treatment	GSE12466	CD3+ T-cells from C57BL mouse + 1 mg/ml anti-CD3 _vs_ untreated	-	394	6.50E-17
188	Drug treatment	GSE17886	Two-cell embryo from maternal pronuclei strain C57BL-6 treated with alpha-amanitin _vs_ untreated	+	1010	7.90E-17
189	Aging	GSE2154	Chondrocyte micromass cultures from E11.5 limb buds differentiated for 9d _vs_ 3d	+	325	8.20E-17
190	Drug treatment	GSE11898	Mesangial cells of kidney stimulated 6hr with double stranded DNA _vs_ lipofectamine control	-	394	8.80E-17
191	TRAP	GSE13394	Drd2 subclass of medium spiny neurons from mouse striatum - TRAP purified _vs_ unbound RNA	+	441	1.00E-16
192	Tumor	GSE6482	Kaposi-like tumor _vs_ mEC cells + empty vector	+	545	1.00E-16
193	Aging	GSE2154	Chondrocyte micromass cultures from E11.5 limb buds differentiated for 15d _vs_ 3d	+	342	1.10E-16
194	Aging	GSE4818	Testes gestational day18 _vs_ day11	+	602	1.40E-16
195	Drug treatment	GSE15457	RAW264.7 mouse macrophages + 2.1 mM HOCl 6hr _vs_ untreated	-	382	1.40E-16
196	Treatment	GSE15129	Liver of 14mo old SAMP1 mouse fed diet supplemented with reduced coenzyme Q10 _vs_ control diet	+	212	1.50E-16
197	Aging	GSE5333	Epididymus pnd2 _vs_ gd12	+	296	1.80E-16
198	Comparison of tissues	GSE15209	Glioblastoma _vs_ normal brain cortex	-	725	1.80E-16
199	Drug treatment	GSE17880	Spleen of mice treated with 900mg/kg/d 2-butoxyethanol 7d _vs_ vehicle	-	847	1.80E-16
200	Comparison of tissues	GSE15580	Adult mouse Sca1-low transit-amplifying cells _vs_ embryonic prostate stem cells	+	575	1.80E-16
201	Neurodegeneration	E-MEXP-1005	Brain from mice after 120d ME7-inoculated _vs_ mock	+	119	2.10E-16
202	Comparison of tissues	GSE10871	MEF derived partly reprogrammed SSEA+ MCV8 cells with Oct4 Klf4 C-Myc Sox2 _vs_ Oct4 MVC8 iPS	+	685	2.20E-16
203	Treatment	GSE17825	Femur fracture tissue in 6wk old mice 5d post fracture _vs_ 1d post fracture	+	720	2.20E-16
204	Neurodegeneration	E-MEXP-1005	Brain from mice after 150d ME7-inoculated _vs_ mock	+	200	2.50E-16
205	Aging	GSE17783	Callosal projection neurons - P14 _vs_ E18	+	259	2.60E-16
206	Not categorized yet	GSE5876	Lacrimal gland from female MPR-lpr mice _vs_ Non-obese diabetic female mice_GPL339	+	189	2.60E-16
207	Genetic modification	GSE12956	Telencephalon of E14.5 embryo - Arx mutant _vs_ WT	+	344	2.70E-16
208	Genetic modification	GSE5037	Spinal cord from SOD1-null mice _vs_ wild-type	+	120	3.00E-16
209	Aging	GSE18567	Cochlea of nicotinic cholinergic receptor (alpha9 subunit) null mice - P60 _vs_ P3	+	425	3.00E-16
210	Comparison of tissues	GSE15767	Non-immunized subcapsular sinus macrophages of female C57BL/6 mice _vs_ medullary macrophages	-	409	3.10E-16
211	Treatment	GSE6858	Lung from wildtype mice + allergen ovalbumin _vs_ vehicle control	+	346	3.20E-16
212	Drug treatment	E-TABM-310	Macrophages from wild type rat + PAM2 60min _vs_ untreated	-	357	3.20E-16
213	Aging	GSE15452	Lung of FGFR3 FGFR4 double knockout mice - 28d old _vs_ 1d old	+	577	3.50E-16
214	Genetic modification	GSE10849	Heart from caveolin-1 knockout mice _vs_ wildtype	+	150	3.50E-16

215	Infection	E-MEXP-1190	Liver from C57BL/6 mice T. congolense-infected for 7d _vs_ uninfected	+	296	3.80E-16
216	Infection	GSE8025	FVB/N mouse colon infected 9d _vs_ non-infected	-	594	4.50E-16
217	Comparison of tissues	GSE12618	Embryonic bladder mesenchymal cells _vs_ epithelial cells	+	367	4.50E-16
218	Neurodegeneration	E-MEXP-1005	Brain from ME7-inoculated mice after 120d _vs_ not inoculated	+	195	4.70E-16
219	Comparison of tissues	GSE11274	Germline pluripotent stem cells derived from adult Oct4-GFP GSCs _vs_ MEFS from E12.5 mice	-	829	5.40E-16
220	Tumor	GSE15904	Mammary tumor from MMTV-MYC mice of Epithelial-Mesenchymal Transition subtype _vs_ MMTV-Neu tumors	+	577	5.70E-16
221	Drug treatment	GSE3293	Gallbladders of leptin deficient obese mice + Leptin _vs_ Saline injections	+	344	5.90E-16
222	Infection	GSE7814	Cerebral-malaria-susceptible infected by Plasmodium for 6 days _vs_ cerebral-malaria resistant	+	179	6.10E-16
223	Comparison of tissues	GSE7809	Mouse ICC from Myenteric Plexus _vs_ Tunica Muscularis	-	289	7.30E-16
224	Drug treatment	GSE6674	AM14 B cells+anti-IgM+CpG _vs_ AM14 B cells untreated	-	382	7.40E-16
225	Treatment	GSE23006	Mucosa of tongue from Balb/c mice - 10d post-wound _vs_ unwounded	+	298	7.50E-16
226	Drug treatment	GSE6689	Stem cells+growth factor stimulation-Time point 2 _vs_ naive	+	450	8.40E-16
227	Infection	E-MEXP-1190	Spleen from C57BL/6 mice T. congolense-infected for 3d _vs_ uninfected	-	270	8.50E-16
228	Relative gene expression	GSE4734	DBA/2J periaqueductal gray - relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	8.80E-16
229	Drug treatment	GSE13044	Fetal livers from timed pregnant mice exposed gestation days 1-17 - 3mg/kg/day PFOA _vs_ vehicle	-	274	9.80E-16
230	Aging	GSE18567	Cochlea of wildtype mice - P60 _vs_ P3	+	343	9.90E-16
231	Tumor	GSE11859	Olig2-tva-cre:SmoM2 mice - Cerebellar tumor _vs_ non-tumor cerebellar tissue	-	635	1.10E-15
232	Treatment	GSE19403	Demyelinated spinal cord white matter from wildtype mice - induced by lysolecithin 15d _vs_ 4d	+	633	1.10E-15
233	Injury	GSE5296	Spinal cord impact site 28d after injury _vs_ sham-injury	+	388	1.20E-15
234	Aging	GSE15452	Lung of FGFR3 FGFR4 double heterozygous mice - 28d old _vs_ 1d old	+	654	1.30E-15
235	Drug treatment	GSE18660	CGR8 ESC differentiated 5d treated 10d with 1mM 1-ethyl-2-benzimidazolinone _vs_ untreated 10d	-	512	1.30E-15
236	Infection	GSE18293	Liver of Braun lipoprotein KO mutant Y. pestis infected mouse at 48hr post infection _vs_ uninfecte	+	571	1.40E-15
237	Aging	GSE16585	Retina overexpressing Nr1 - 28d old mice _vs_ 14d	-	318	1.50E-15
238	Comparison of tissues	GSE15330	Ikaros-shRNA transfected - megakaryo-erythrocyte progenitors _vs_ hematopoietic stem cells	-	378	1.50E-15
239	Genetic modification	GSE10634	Kidney of P7 aquaporin 11 knockout mouse _vs_ wildtype	+	292	1.60E-15
240	Genetic modification	GSE13104	Osteosarcoma arisen from p53 heterozygous mouse _vs_ mc3T3 mouse osteoblast	+	480	1.60E-15
241	Comparison of tissues	GSE13074	Retinal pigment epithelium from light damaged BALB/c mice _vs_ dark adapted	+	122	1.70E-15
242	TRAP	GSE13379	TRAP motor neuronal RNA from mouse brainstem _vs_ unbound RNA	-	605	1.80E-15
243	TRAP	GSE13394	Motor neurons from mouse brainstems - TRAP purified _vs_ unbound RNA	-	601	2.10E-15
244	Infection	E-MEXP-1190	Liver from BALB/c mice T. congolense-infected for 7d _vs_ uninfected	+	392	2.10E-15
245	Infection	E-MEXP-1190	Liver from A/J mice T. congolense-infected for 7d _vs_ uninfected	+	493	2.20E-15
246	Aging	GSE5334	Gonad development at pnd 2 _vs_ gd12	+	487	2.40E-15
247	Relative gene expression	GSE4734	C57BL/6J periaqueductal gray - relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	2.50E-15
248	Drug treatment	GSE18800	Mouse lung wildtype 14d after intratracheal bleomycin 1 mg/kg _vs_ no bleomycin	+	564	2.70E-15
249	Genetic modification	GSE16389	Villi enterocytes from transgenic mice with mutant Fabpi-SV40 TAg-N132 _vs_ non-transgenic mice	-	328	2.70E-15
250	Genetic modification	GSE23908	Ovaries from E16 embryos lacking germ cells (homozygous Kit W-v mutation) _vs_ wildtype	+	309	3.30E-15
251	Aging	GSE18597	Spinal cord SOD1 G93A mutant - 126 day old _vs_ 28 day old	+	504	3.50E-15

252	Injury	GSE5296	Spinal cord below impact site 24h after injury _vs_ naive	+	112	4.00E-15
253	Drug treatment	GSE6689	Stem cells+growth factor stimulation-Time point 3 _vs_ naive	+	258	4.00E-15
254	Infection	GSE6765	Small intestine from A. caviae-infected mice _vs_ uninfected	+	202	4.00E-15
255	Not categorized yet	GSE17617	C57BL6J X DBA2J mouse orexin-expressing neurons _vs_ whole brain	-	916	4.40E-15
256	Drug treatment	GSE17297	Mesentery from DBA mice 3d post-intraperitoneal injection 0.5 ml pristane _vs_ untreated control	+	512	4.60E-15
257	Drug treatment	GSE12466	CD3+ T-cells + 1 mg/ml anti-CD3 from Itk KO C57BL mouse _vs_ wildtype C57BL	+	251	4.70E-15
258	Treatment	GSE4066	Dorsal skin CD-1 mice + DMSO & UV irradiation 24h _vs_ sham irradiation	+	233	5.00E-15
259	Not categorized yet	GSE3234	Hematopoietic cells- downstream progenitors (Sca-1+cKit+) _vs_ bone marrow	-	317	5.70E-15
260	Genetic modification	GSE15541	Bone marrow transformed with NUP98-HOXD13 + M33-MEIS1 fusion overexpression _vs_ control	-	413	7.50E-15
261	Tumor	GSE9355	Sorted mammary tumor from WT mice _vs_ hyperplastic mammary cells	-	234	7.50E-15
262	Genetic modification	GSE16585	Retina of 14d old mice - Nr1 overexpression and Rorb KO _vs_ wildtype	+	542	8.20E-15
263	Relative gene expression	GSE2882	Cingulate cortex_GIN_GABA neurons homogenate - relative gene expression	+	929	9.00E-15
264	Injury	GSE7404	WBC from spleen at 1d after burn injury _vs_ burn injury sham	-	605	9.80E-15
265	Drug treatment	GSE18341	Lungs of 16wk adult C57BL6 mice + LPS 30min + spontaneous breathing 2hr _vs_ untreated 2hr	-	488	1.00E-14
266	Treatment	GSE5555	Lungs with resolved N. brasiliensis infection- 72hr post HDM in PBS challenge _vs_ no challenge	-	538	1.00E-14
267	Injury	GSE5296	Spinal cord below impact site 7d after injury _vs_ naive	+	339	1.10E-14
268	Tumor	GSE14038	Primary tumor plexiform neurofibroma _vs_ universal tissue reference	+	722	1.10E-14
269	Genetic modification	GSE6789	IRAK4-KD MEFs IL1b-stimulated 1h _vs_ wildtype	+	220	1.10E-14
270	Comparison of tissues	GSE6259	DCs from WT mice sorted for - 33D1+ _vs_ DEC205+	+	381	1.10E-14
271	Aging	GSE5333	Epididymus gd14 _vs_ gd12	+	382	1.20E-14
272	Not categorized yet	GSE3792	ES-D3 cells differentiated 16d toward osteoblasts _vs_ undirected	+	427	1.20E-14
273	Aging	GSE21716	Livers from C57BL6J mice at 18mo (old age) _vs_ 6mo (young adult)	+	98	1.30E-14
274	Comparison of tissues	GSE17955	Amygdala from 3-4mo old C57BL/6J mice _vs_ hippocampus	-	79	1.40E-14
275	Relative gene expression	GSE4734	A_J pituitary gland - relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	-	1411	1.50E-14
276	Tumor	GSE21603	Colon from BCL9 BCL9L double KO mice - dimethylhydrazine induced colon tumor _vs_ normal epithelium	+	650	1.70E-14
277	Not categorized yet	GSE11141	NgR transgenic overexpression in mature brain dentate gyrus _vs_ developing brain	+	202	1.80E-14
278	Aging	GSE19626	Eyes of wildtype mice - E16.5 embryos _vs_ E10.5	+	409	1.90E-14
279	Genetic modification	GSE9892	Liver from TGFbeta1 null mice _vs_ wildtype	+	413	1.90E-14
280	Comparison of tissues	GSE15330	Wildtype megakaryo-erythrocyte progenitors _vs_ hematopoietic stem cells	-	474	2.00E-14
281	Aging	GSE5334	Gonad development at pnd 2 _vs_ gd14	+	420	2.10E-14
282	Comparison of tissues	GSE13394	Purkinje neurons from cerebellum _vs_ motor neurons from brainstem	-	784	2.20E-14
283	Treatment	GSE19322	Non-infarct region of left ventricle of MRL mice - 5d after myocardial infarction _vs_ healthy	+	368	2.20E-14
284	Treatment	GSE5555	Lungs with resolved N. brasiliensis infection- 6hr post PBS challenge _vs_ no challenge	-	424	2.40E-14
285	Not categorized yet	GSE5350	Ambion human brain reference RNA _vs_ Stratagene universal reference RNA_Illumina plat_GPL2507	+	735	2.40E-14
286	Comparison of tissues	GSE15724	Tracheal epithelium- basal cells ( KRT5-GFP- lectin+) _vs_ columnar cells ( KRT5-GFP- lectin-).1	+	301	2.40E-14
287	Not categorized yet	GSE10913	Murine decidual response in uterine stroma Bmp2 ff uterus horn _vs_ Bmp2 dd uterus horn	-	245	2.50E-14
288	Aging	GSE5334	Gonad development at pnd 0.5 _vs_ gd12	+	519	2.60E-14

289 Tumor	GSE15460	Pool of gastric cancer cell lines _vs_ primary gastric tumors_GPL570	-	743	2.60E-14
290 Comparison of tissues	GSE13394	Drd2 subclass of medium spiny neurons from mouse striatum _vs_ motor neurons from brainstem	+	781	2.70E-14
291 Drug treatment	E-TABM-141	Min6 B1 pancreatic beta cells pretreated with CHX- chlorophenylthio-cAMP + glucose _vs_ no treatment	-	432	2.70E-14
292 Comparison of tissues	GSE13408	Wildtype Embryoid body _vs_ Embryonic Stem Cells	+	481	2.70E-14
293 Neurodegeneration	GSE23182	Hippocampal tissue from mice inoculated with ME7 prion + 500ug/kg LPS 18wk after _vs_ saline	+	198	2.80E-14
294 Tumor	GSE14038	Primary tumor dermal neurofibroma _vs_ universal tissue reference	+	744	2.80E-14
295 Infection	GSE11494	NALT from mice infected with attenuated S. pyogenes lacking M1 and SCPA proteins _vs_ sham infected	+	140	2.80E-14
296 Infection	GSE13522	Skin from Balb/c mice infected by Trypanosoma cruzi Y strain 24hr _vs_ saline control	+	349	2.80E-14
297 Not categorized yet	GSE10011	NIH-3T3 labelled 30min 200uM 4-thiouridine – newly transcribed RNA _vs_ total cellular RNA	-	832	2.90E-14
298 Infection	E-MEXP-1190	Liver from C57BL-6 mice T. congolense-infected for 17d _vs_ uninfected	+	608	3.00E-14
299 Injury	GSE5296	Spinal cord above impact site 7d after injury _vs_ naive	+	248	3.10E-14
300 Relative gene expression	GSE4734	DBA.2J bed nucleus of the stria terminalis – relative gene expression compared to the median of its expression across 5 brain regions in 6 strains	+	1411	3.40E-14