

# IMPC data analysis

Tal Lahav , Iman Jaljuli

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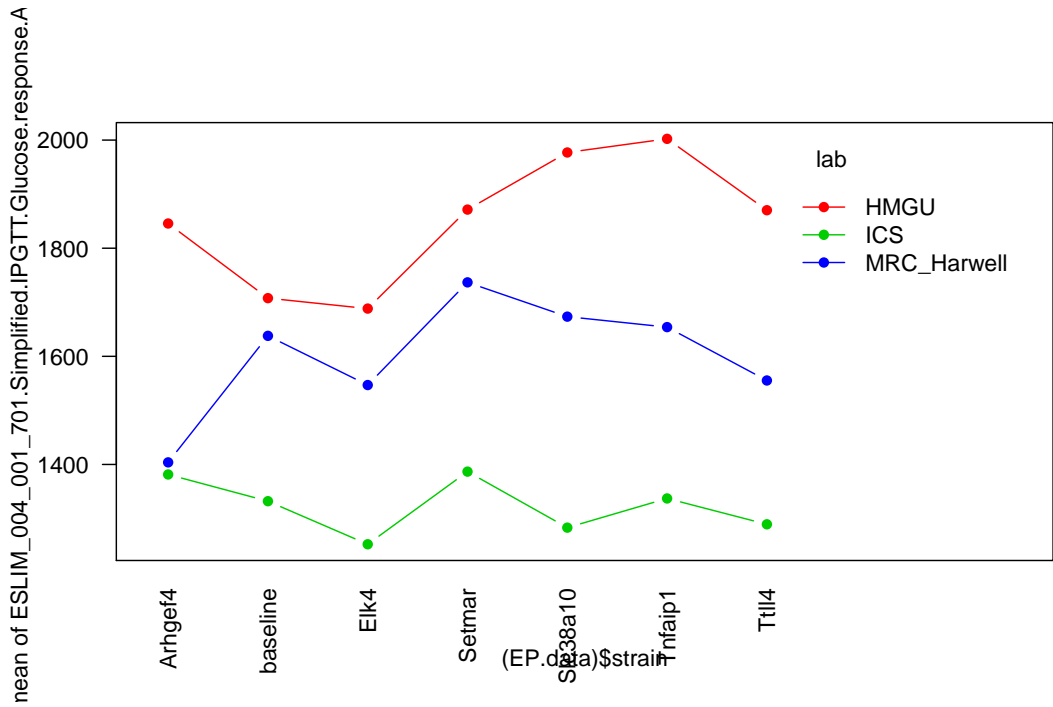
## Males Data Analysis

**1** **ESLIM\_004\_001\_701.Simplified.IPGTT.Glucose.response.AUC**  
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	294
5	baseline	ICS	414
6	baseline	MRC_Harwell	332
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	9
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	8
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	8
21	Ttll4	MRC_Harwell	12

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	7
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

### Animals dropped



### Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	1845.718	145.53625	7
2	Arhgef4	ICS	1381.463	134.48583	10
3	Arhgef4	MRC_Harwell	1403.833	280.03884	9
4	baseline	HMGU	1707.626	233.50735	294
5	baseline	ICS	1332.028	173.02572	414
6	baseline	MRC_Harwell	1637.867	284.92348	332
7	Elk4	HMGU	1688.311	329.22719	11
8	Elk4	ICS	1252.350	148.05992	7
9	Elk4	MRC_Harwell	1546.886	304.33331	7
10	Setmar	HMGU	1871.475	90.09169	7
11	Setmar	ICS	1386.733	177.01763	9
12	Setmar	MRC_Harwell	1736.827	202.44748	13
13	Slc38a10	HMGU	1977.084	404.30441	8
14	Slc38a10	ICS	1283.081	146.70335	4
15	Slc38a10	MRC_Harwell	1673.417	154.77272	9
16	Tnfaip1	HMGU	2002.339	240.48944	7
17	Tnfaip1	ICS	1337.096	149.02374	9
18	Tnfaip1	MRC_Harwell	1654.038	420.94787	13
19	Ttll4	HMGU	1870.294	117.94580	4
20	Ttll4	ICS	1289.269	194.50739	8
21	Ttll4	MRC_Harwell	1555.312	292.66955	12

S2.GxL= 4114.557 S2.GxL/S2.error= 0.07551128

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	1387410.268	231235.045	4.239	0.000	1.449	0.275
lab	2	34722709.040	17361354.520	318.245	0.000		
strain:lab	12	1530872.483	127572.707	2.338	0.006		
Residuals	1173	63991257.581	54553.502				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	17.440	0.707	70.093	0.808
2	Elk4	Arhgef4	-49.524	0.449	84.253	0.568
3	Setmar	Arhgef4	127.923	0.043	82.423	0.147
4	Slc38a10	Arhgef4	118.871	0.083	87.071	0.197
5	Tnfaip1	Arhgef4	115.206	0.068	82.423	0.187
6	Ttll4	Arhgef4	17.098	0.796	85.440	0.845
7	Elk4	baseline	-66.964	0.157	70.891	0.363
8	Setmar	baseline	110.483	0.012	68.822	0.134
9	Slc38a10	baseline	101.432	0.049	74.213	0.197
10	Tnfaip1	baseline	97.767	0.026	68.822	0.181
11	Ttll4	baseline	-0.342	0.994	72.471	0.996

12	Setmar	Elk4	177.447	0.005	83.217	0.054
13	Slc38a10	Elk4	168.395	0.015	87.589	0.079
14	Tnfaip1	Elk4	164.730	0.010	83.217	0.071
15	Ttll4	Elk4	66.622	0.318	86.351	0.455
16	Slc38a10	Setmar	-9.052	0.892	85.950	0.918
17	Tnfaip1	Setmar	-12.717	0.836	81.275	0.878
18	Ttll4	Setmar	-110.825	0.086	84.301	0.213
19	Tnfaip1	Slc38a10	-3.665	0.956	85.950	0.967
20	Ttll4	Slc38a10	-101.773	0.145	88.937	0.275
21	Ttll4	Tnfaip1	-98.108	0.128	84.301	0.267

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-138.092	53856.556	299	0.121	44.338	0.282
2	HMGU	Elk4	Arhgef4	-157.406	75686.888	16	0.254	26.656	0.337
3	HMGU	Setmar	Arhgef4	25.757	14648.657	12	0.698	21.698	0.819
4	HMGU	Slc38a10	Arhgef4	131.367	97793.786	13	0.432	20.282	0.487
5	HMGU	Tnfaip1	Arhgef4	156.621	39507.985	12	0.166	23.425	0.274
6	HMGU	Ttll4	Arhgef4	24.576	18757.604	9	0.781	20.836	0.846
7	HMGU	Elk4	baseline	-19.315	56303.402	303	0.791	31.956	0.869
8	HMGU	Setmar	baseline	163.849	53594.397	299	0.065	44.142	0.203
9	HMGU	Slc38a10	baseline	269.458	57067.533	300	0.002	41.567	0.037
10	HMGU	Tnfaip1	baseline	294.713	54592.095	299	0.001	44.888	0.025
11	HMGU	Ttll4	baseline	162.667	54114.051	296	0.166	76.681	0.276
12	HMGU	Setmar	Elk4	183.164	70787.780	16	0.174	26.975	0.255
13	HMGU	Slc38a10	Elk4	288.773	131067.048	17	0.104	25.294	0.143
14	HMGU	Tnfaip1	Elk4	314.028	89432.276	16	0.045	25.754	0.077
15	HMGU	Ttll4	Elk4	181.982	86587.618	13	0.309	19.608	0.360
16	HMGU	Slc38a10	Setmar	105.609	91764.115	13	0.512	20.654	0.566
17	HMGU	Tnfaip1	Setmar	130.864	32975.841	12	0.202	23.891	0.334
18	HMGU	Ttll4	Setmar	-1.181	10048.079	9	0.985	20.105	0.992
19	HMGU	Tnfaip1	Slc38a10	25.255	114711.187	13	0.888	19.389	0.900
20	HMGU	Ttll4	Slc38a10	-106.791	118596.805	10	0.624	13.653	0.649
21	HMGU	Ttll4	Tnfaip1	-132.046	43193.850	9	0.337	16.870	0.417
22	ICS	baseline	Arhgef4	-49.434	29685.145	422	0.370	22.418	0.646
23	ICS	Elk4	Arhgef4	-129.113	19620.558	15	0.081	23.592	0.269
24	ICS	Setmar	Arhgef4	5.271	24321.169	17	0.942	24.824	0.964
25	ICS	Slc38a10	Arhgef4	-98.381	18945.296	12	0.250	23.726	0.428
26	ICS	Tnfaip1	Arhgef4	-44.367	20026.032	17	0.504	23.179	0.695
27	ICS	Ttll4	Arhgef4	-92.194	26725.613	16	0.252	25.666	0.447
28	ICS	Elk4	baseline	-79.678	29823.111	419	0.227	27.742	0.483
29	ICS	Setmar	baseline	54.705	29964.454	421	0.349	23.856	0.617
30	ICS	Slc38a10	baseline	-48.947	29877.208	416	0.573	43.030	0.699
31	ICS	Tnfaip1	baseline	5.068	29791.016	421	0.931	23.776	0.963
32	ICS	Ttll4	baseline	-42.760	30069.488	420	0.490	25.616	0.700
33	ICS	Setmar	Elk4	134.383	27300.884	14	0.129	25.328	0.285

34	ICS	Slc38a10	Elk4	30.731	21788.451	9	0.747	20.448	0.815
35	ICS	Tnfaip1	Elk4	84.746	22085.360	14	0.277	24.269	0.478
36	ICS	Ttll4	Elk4	36.919	30489.408	13	0.690	24.952	0.775
37	ICS	Slc38a10	Setmar	-103.652	28658.869	11	0.330	22.442	0.455
38	ICS	Tnfaip1	Setmar	-49.638	26771.659	16	0.529	25.591	0.680
39	ICS	Ttll4	Setmar	-97.465	34367.587	15	0.296	26.624	0.453
40	ICS	Tnfaip1	Slc38a10	54.015	22020.929	11	0.557	22.984	0.675
41	ICS	Ttll4	Slc38a10	6.188	32939.749	10	0.957	20.267	0.966
42	ICS	Ttll4	Tnfaip1	-47.827	29499.765	15	0.575	26.006	0.701
43	MRC_Harwell	baseline	Arhgef4	234.033	81116.264	339	0.016	51.861	0.083
44	MRC_Harwell	Elk4	Arhgef4	143.052	84506.186	14	0.345	22.871	0.415
45	MRC_Harwell	Setmar	Arhgef4	332.994	55959.690	20	0.004	31.453	0.021
46	MRC_Harwell	Slc38a10	Arhgef4	269.583	51188.172	16	0.022	27.991	0.064
47	MRC_Harwell	Tnfaip1	Arhgef4	250.205	137686.968	20	0.136	29.729	0.186
48	MRC_Harwell	Ttll4	Arhgef4	151.479	82609.692	19	0.247	30.698	0.339
49	MRC_Harwell	Elk4	baseline	-90.981	81385.021	337	0.404	66.657	0.523
50	MRC_Harwell	Setmar	baseline	98.960	79775.100	343	0.216	37.026	0.418
51	MRC_Harwell	Slc38a10	baseline	35.550	79830.904	339	0.710	51.064	0.788
52	MRC_Harwell	Tnfaip1	baseline	16.172	84540.539	343	0.844	38.884	0.896
53	MRC_Harwell	Ttll4	baseline	-82.554	81325.292	342	0.325	40.191	0.508
54	MRC_Harwell	Setmar	Elk4	189.941	58196.244	18	0.110	29.991	0.200
55	MRC_Harwell	Slc38a10	Elk4	126.531	53382.096	14	0.296	25.285	0.399
56	MRC_Harwell	Tnfaip1	Elk4	107.153	149004.331	18	0.561	25.744	0.601
57	MRC_Harwell	Ttll4	Elk4	8.427	88113.102	17	0.953	27.335	0.960
58	MRC_Harwell	Slc38a10	Setmar	-63.410	34172.827	20	0.438	27.864	0.605
59	MRC_Harwell	Tnfaip1	Setmar	-82.788	109091.048	24	0.529	35.997	0.604
60	MRC_Harwell	Ttll4	Setmar	-181.514	62349.128	23	0.082	33.254	0.188
61	MRC_Harwell	Tnfaip1	Slc38a10	-19.378	115900.105	20	0.897	30.668	0.912
62	MRC_Harwell	Ttll4	Slc38a10	-118.104	59676.152	19	0.287	30.899	0.408
63	MRC_Harwell	Ttll4	Tnfaip1	-98.726	133416.326	23	0.506	34.357	0.570

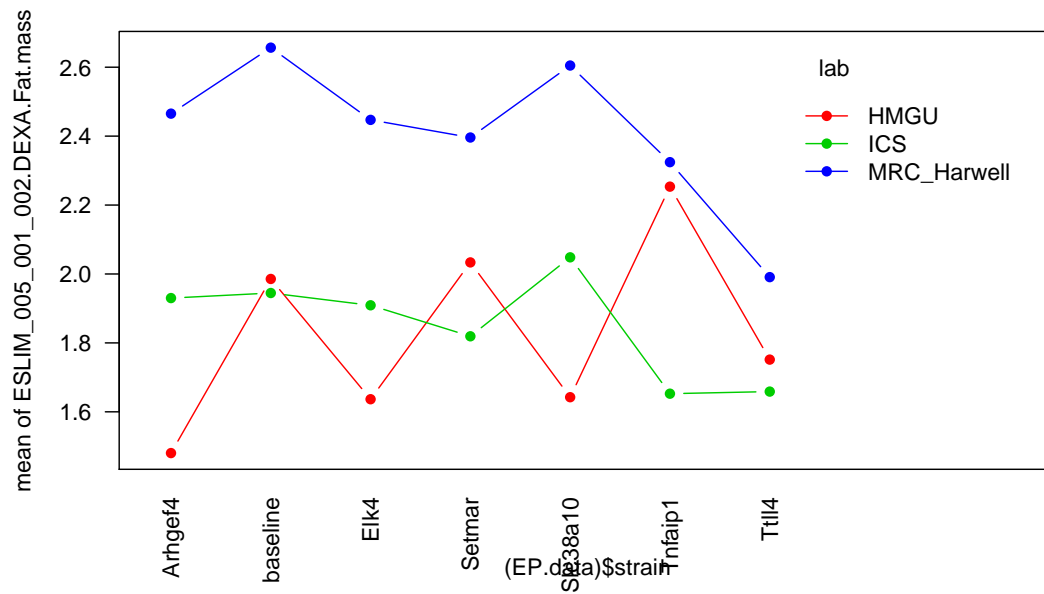
## 2 ESLIM\_005\_001\_002.DEXA.Fat.mass

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	307
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	1.480257	0.6099010	7
2	Arhgef4	ICS	1.930054	0.2154859	10
3	Arhgef4	MRC_Harwell	2.465235	0.4795688	9
4	baseline	HMGU	1.985543	0.7458022	307
5	baseline	ICS	1.944742	0.4271214	445
6	baseline	MRC_Harwell	2.656777	0.3531603	300
7	Elk4	HMGU	1.636556	0.3676302	11
8	Elk4	ICS	1.909102	0.2342702	7
9	Elk4	MRC_Harwell	2.447153	0.4314550	7
10	Setmar	HMGU	2.033534	0.6991873	7
11	Setmar	ICS	1.819173	0.4894547	10
12	Setmar	MRC_Harwell	2.396030	0.2173348	13
13	Slc38a10	HMGU	1.642374	1.0590855	12
14	Slc38a10	ICS	2.048274	0.6351630	4
15	Slc38a10	MRC_Harwell	2.604868	0.3664817	9
16	Tnfaip1	HMGU	2.253439	1.0316719	7
17	Tnfaip1	ICS	1.652605	0.2034346	9
18	Tnfaip1	MRC_Harwell	2.324449	0.2715953	13
19	Ttll4	HMGU	1.751525	0.9078616	4
20	Ttll4	ICS	1.658718	0.3117440	6
21	Ttll4	MRC_Harwell	1.990829	0.4381244	11

S2.GxL= 0.00984 S2.GxL/S2.error= 0.03550261

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	3.969	0.662	2.390	0.027	1.946	0.154
lab	2	115.308	57.654	208.299	0.000		
strain:lab	12	5.208	0.434	1.568	0.095		
Residuals	1187	328.543	0.277				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.215	0.039	0.133	0.130
2	Elk4	Arhgef4	-0.001	0.995	0.169	0.996
3	Setmar	Arhgef4	0.085	0.549	0.163	0.614
4	Slc38a10	Arhgef4	0.072	0.623	0.170	0.678
5	Tnfaip1	Arhgef4	0.061	0.669	0.164	0.718
6	Ttll4	Arhgef4	-0.231	0.135	0.176	0.215
7	Elk4	baseline	-0.216	0.043	0.134	0.134
8	Setmar	baseline	-0.131	0.180	0.128	0.326
9	Slc38a10	baseline	-0.143	0.180	0.136	0.314
10	Tnfaip1	baseline	-0.155	0.119	0.129	0.253
11	Ttll4	baseline	-0.446	0.000	0.144	0.009



12	Setmar	Elk4	0.085	0.549	0.165	0.615
13	Slc38a10	Elk4	0.073	0.622	0.171	0.676
14	Tnfaip1	Elk4	0.062	0.668	0.166	0.718
15	Ttll4	Elk4	-0.230	0.140	0.178	0.221
16	Slc38a10	Setmar	-0.012	0.932	0.167	0.943
17	Tnfaip1	Setmar	-0.024	0.862	0.160	0.884
18	Ttll4	Setmar	-0.315	0.035	0.172	0.092
19	Tnfaip1	Slc38a10	-0.012	0.935	0.167	0.945
20	Ttll4	Slc38a10	-0.303	0.052	0.179	0.116
21	Ttll4	Tnfaip1	-0.291	0.053	0.173	0.118

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.505	0.553	312	0.076	189.702	0.113
2	HMGU	Elk4	Arhgef4	0.156	0.224	16	0.504	25.487	0.565
3	HMGU	Setmar	Arhgef4	0.553	0.430	12	0.141	15.745	0.163
4	HMGU	Slc38a10	Arhgef4	0.162	0.857	17	0.717	20.330	0.729
5	HMGU	Tnfaip1	Arhgef4	0.773	0.718	12	0.114	14.281	0.125
6	HMGU	Ttll4	Arhgef4	0.271	0.523	9	0.564	10.734	0.579
7	HMGU	Elk4	baseline	-0.349	0.543	316	0.124	123.649	0.192
8	HMGU	Setmar	baseline	0.048	0.555	312	0.866	190.335	0.880
9	HMGU	Slc38a10	baseline	-0.343	0.576	317	0.125	120.558	0.196
10	HMGU	Tnfaip1	baseline	0.268	0.566	312	0.352	193.415	0.403
11	HMGU	Ttll4	baseline	-0.234	0.559	309	0.534	267.656	0.560
12	HMGU	Setmar	Elk4	0.397	0.268	16	0.132	24.422	0.179
13	HMGU	Slc38a10	Elk4	0.006	0.652	21	0.986	27.464	0.987
14	HMGU	Tnfaip1	Elk4	0.617	0.484	16	0.085	21.199	0.105
15	HMGU	Ttll4	Elk4	0.115	0.294	13	0.722	17.858	0.744
16	HMGU	Slc38a10	Setmar	-0.391	0.898	17	0.398	20.184	0.417
17	HMGU	Tnfaip1	Setmar	0.220	0.777	12	0.649	14.112	0.661
18	HMGU	Ttll4	Setmar	-0.282	0.601	9	0.576	10.509	0.589
19	HMGU	Tnfaip1	Slc38a10	0.611	1.101	17	0.238	19.618	0.253
20	HMGU	Ttll4	Slc38a10	0.109	1.058	14	0.857	15.550	0.860
21	HMGU	Ttll4	Tnfaip1	-0.502	0.984	9	0.440	9.920	0.449
22	ICS	baseline	Arhgef4	0.015	0.180	453	0.914	43.865	0.940
23	ICS	Elk4	Arhgef4	-0.021	0.050	15	0.851	24.026	0.907
24	ICS	Setmar	Arhgef4	-0.111	0.143	18	0.520	29.993	0.617
25	ICS	Slc38a10	Arhgef4	0.118	0.136	12	0.597	20.488	0.653
26	ICS	Tnfaip1	Arhgef4	-0.277	0.044	17	0.010	22.480	0.117
27	ICS	Ttll4	Arhgef4	-0.271	0.065	14	0.058	25.471	0.170
28	ICS	Elk4	baseline	-0.036	0.181	450	0.826	62.344	0.868
29	ICS	Setmar	baseline	-0.126	0.184	453	0.360	44.730	0.525
30	ICS	Slc38a10	baseline	0.104	0.184	447	0.631	117.712	0.688
31	ICS	Tnfaip1	baseline	-0.292	0.180	452	0.041	48.389	0.151
32	ICS	Ttll4	baseline	-0.286	0.181	449	0.103	73.727	0.206
33	ICS	Setmar	Elk4	-0.090	0.166	15	0.660	25.604	0.716

34	ICS	Slc38a10	Elk4	0.139	0.171	9	0.604	14.133	0.644
35	ICS	Tnfaip1	Elk4	-0.256	0.047	14	0.034	23.570	0.163
36	ICS	Ttll4	Elk4	-0.250	0.074	11	0.127	22.673	0.238
37	ICS	Slc38a10	Setmar	0.229	0.281	12	0.479	16.624	0.514
38	ICS	Tnfaip1	Setmar	-0.167	0.146	17	0.357	28.928	0.465
39	ICS	Ttll4	Setmar	-0.160	0.189	14	0.486	22.989	0.550
40	ICS	Tnfaip1	Slc38a10	-0.396	0.140	11	0.106	18.636	0.152
41	ICS	Ttll4	Slc38a10	-0.390	0.212	8	0.226	11.578	0.260
42	ICS	Ttll4	Tnfaip1	0.006	0.063	13	0.964	24.753	0.975
43	MRC_Harwell	baseline	Arhgef4	0.192	0.127	307	0.114	35.621	0.308
44	MRC_Harwell	Elk4	Arhgef4	-0.018	0.211	14	0.939	22.607	0.947
45	MRC_Harwell	Setmar	Arhgef4	-0.069	0.120	20	0.650	30.928	0.739
46	MRC_Harwell	Slc38a10	Arhgef4	0.140	0.182	16	0.498	26.871	0.574
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.141	0.136	20	0.390	31.525	0.513
48	MRC_Harwell	Ttll4	Arhgef4	-0.474	0.209	18	0.033	29.183	0.066
49	MRC_Harwell	Elk4	baseline	-0.210	0.126	305	0.123	43.459	0.289
50	MRC_Harwell	Setmar	baseline	-0.261	0.122	311	0.009	26.620	0.140
51	MRC_Harwell	Slc38a10	baseline	-0.052	0.125	307	0.665	35.058	0.780
52	MRC_Harwell	Tnfaip1	baseline	-0.332	0.123	311	0.001	26.765	0.064
53	MRC_Harwell	Ttll4	baseline	-0.666	0.127	309	0.000	30.579	0.001
54	MRC_Harwell	Setmar	Elk4	-0.051	0.094	18	0.726	29.040	0.801
55	MRC_Harwell	Slc38a10	Elk4	0.158	0.157	14	0.442	24.334	0.524
56	MRC_Harwell	Tnfaip1	Elk4	-0.123	0.111	18	0.443	29.738	0.564
57	MRC_Harwell	Ttll4	Elk4	-0.456	0.190	16	0.046	26.413	0.083
58	MRC_Harwell	Slc38a10	Setmar	0.209	0.082	20	0.108	27.904	0.275
59	MRC_Harwell	Tnfaip1	Setmar	-0.072	0.060	24	0.465	23.417	0.678
60	MRC_Harwell	Ttll4	Setmar	-0.405	0.113	22	0.008	30.716	0.048
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.280	0.098	20	0.052	29.483	0.161
62	MRC_Harwell	Ttll4	Slc38a10	-0.614	0.166	18	0.004	29.883	0.012
63	MRC_Harwell	Ttll4	Tnfaip1	-0.334	0.127	22	0.033	31.785	0.110

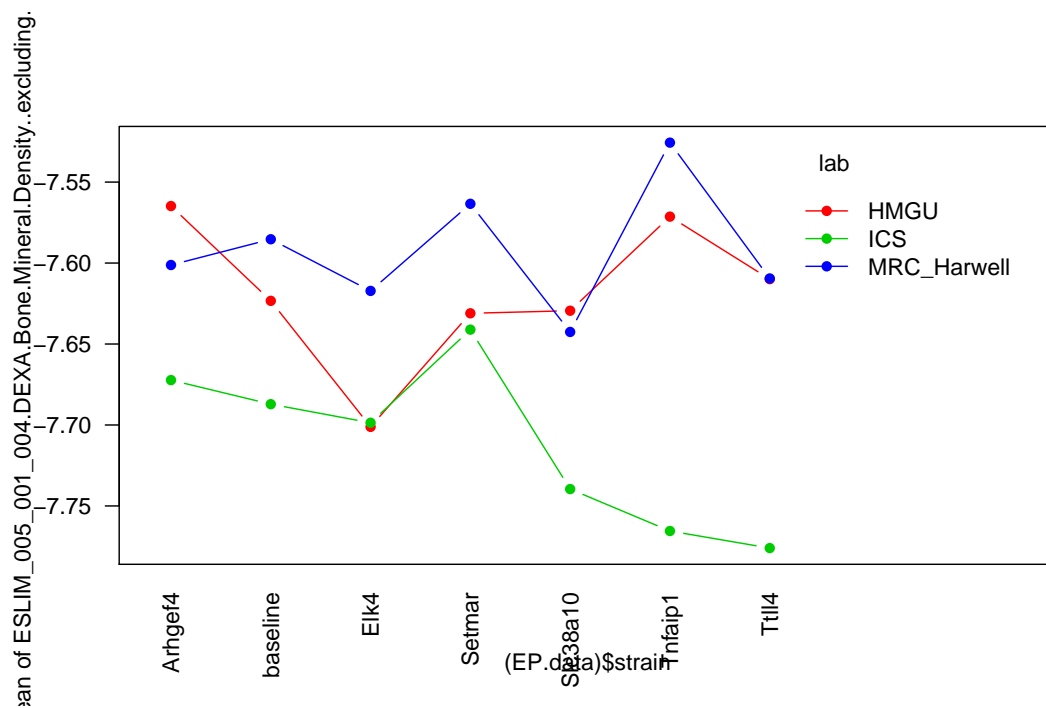
### 3 ESLIM\_005\_001\_004.DEXA.Bone.Mineral.Density..excluding.skull.

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	307
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	-7.564800	0.09861622	7
2	Arhgef4	ICS	-7.672287	0.09592541	10
3	Arhgef4	MRC_Harwell	-7.601210	0.06049619	9
4	baseline	HMGU	-7.623345	0.09276232	307
5	baseline	ICS	-7.687154	0.08346979	445
6	baseline	MRC_Harwell	-7.585311	0.04802134	300
7	Elk4	HMGU	-7.701161	0.07347130	11
8	Elk4	ICS	-7.698623	0.03109014	7
9	Elk4	MRC_Harwell	-7.617198	0.05868179	7
10	Setmar	HMGU	-7.631027	0.07570181	7
11	Setmar	ICS	-7.641121	0.09707174	10
12	Setmar	MRC_Harwell	-7.563424	0.03364594	13
13	Slc38a10	HMGU	-7.629439	0.06843339	12
14	Slc38a10	ICS	-7.739574	0.06032362	4
15	Slc38a10	MRC_Harwell	-7.642550	0.08448429	9
16	Tnfaip1	HMGU	-7.571336	0.07553279	7
17	Tnfaip1	ICS	-7.765470	0.03438864	9
18	Tnfaip1	MRC_Harwell	-7.525647	0.02900964	13
19	Ttll4	HMGU	-7.609920	0.11009478	4
20	Ttll4	ICS	-7.776018	0.03659147	6
21	Ttll4	MRC_Harwell	-7.609519	0.05548104	11

S2.GxL= 0.0011 S2.GxL/S2.error= 0.18502985

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.115	0.019	3.227	0.004	1.329	0.317
lab	2	2.365	1.183	199.209	0.000		
strain:lab	12	0.210	0.017	2.946	0.000		
Residuals	1187	7.047	0.006				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.018	0.234	0.031	0.569
2	Elk4	Arhgef4	-0.061	0.005	0.035	0.103
3	Setmar	Arhgef4	0.004	0.864	0.034	0.919
4	Slc38a10	Arhgef4	-0.055	0.010	0.035	0.141
5	Tnfaip1	Arhgef4	-0.006	0.772	0.034	0.863
6	Ttll4	Arhgef4	-0.053	0.019	0.036	0.164
7	Elk4	baseline	-0.043	0.006	0.031	0.194
8	Setmar	baseline	0.022	0.127	0.031	0.493
9	Slc38a10	baseline	-0.037	0.017	0.032	0.264
10	Tnfaip1	baseline	0.012	0.401	0.031	0.700
11	Ttll4	baseline	-0.035	0.041	0.032	0.305

12	Setmar	Elk4	0.065	0.002	0.034	0.084
13	Slc38a10	Elk4	0.006	0.784	0.035	0.868
14	Tnfaip1	Elk4	0.055	0.009	0.035	0.135
15	Ttll4	Elk4	0.008	0.711	0.036	0.818
16	Slc38a10	Setmar	-0.059	0.005	0.035	0.116
17	Tnfaip1	Setmar	-0.010	0.634	0.034	0.783
18	Ttll4	Setmar	-0.056	0.010	0.035	0.136
19	Tnfaip1	Slc38a10	0.049	0.019	0.035	0.182
20	Ttll4	Slc38a10	0.002	0.914	0.036	0.947
21	Ttll4	Tnfaip1	-0.047	0.034	0.035	0.211

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.059	0.009	312	0.100	29.338	0.328
2	HMGU	Elk4	Arhgef4	-0.136	0.007	16	0.004	25.816	0.037
3	HMGU	Setmar	Arhgef4	-0.066	0.008	12	0.184	24.000	0.328
4	HMGU	Slc38a10	Arhgef4	-0.065	0.006	17	0.109	25.353	0.295
5	HMGU	Tnfaip1	Arhgef4	-0.007	0.008	12	0.892	24.000	0.922
6	HMGU	Ttll4	Arhgef4	-0.045	0.011	9	0.501	17.421	0.578
7	HMGU	Elk4	baseline	-0.078	0.009	316	0.006	22.224	0.169
8	HMGU	Setmar	baseline	-0.008	0.009	312	0.828	29.154	0.897
9	HMGU	Slc38a10	baseline	-0.006	0.008	317	0.822	21.253	0.911
10	HMGU	Tnfaip1	baseline	0.052	0.009	312	0.142	29.153	0.383
11	HMGU	Ttll4	baseline	0.013	0.009	309	0.774	46.008	0.840
12	HMGU	Setmar	Elk4	0.070	0.006	16	0.069	24.021	0.247
13	HMGU	Slc38a10	Elk4	0.072	0.005	21	0.024	21.511	0.209
14	HMGU	Tnfaip1	Elk4	0.130	0.006	16	0.002	24.008	0.038
15	HMGU	Ttll4	Elk4	0.091	0.007	13	0.083	25.000	0.189
16	HMGU	Slc38a10	Setmar	0.002	0.005	17	0.963	23.281	0.978
17	HMGU	Tnfaip1	Setmar	0.060	0.006	12	0.165	23.490	0.345
18	HMGU	Ttll4	Setmar	0.021	0.008	9	0.713	19.110	0.775
19	HMGU	Tnfaip1	Slc38a10	0.058	0.005	17	0.104	23.266	0.325
20	HMGU	Ttll4	Slc38a10	0.020	0.006	14	0.676	25.733	0.768
21	HMGU	Ttll4	Tnfaip1	-0.039	0.008	9	0.505	19.122	0.602
22	ICS	baseline	Arhgef4	-0.015	0.007	453	0.579	21.045	0.786
23	ICS	Elk4	Arhgef4	-0.026	0.006	15	0.498	24.446	0.666
24	ICS	Setmar	Arhgef4	0.031	0.009	18	0.479	27.695	0.629
25	ICS	Slc38a10	Arhgef4	-0.067	0.008	12	0.222	23.720	0.348
26	ICS	Tnfaip1	Arhgef4	-0.093	0.005	17	0.014	23.303	0.121
27	ICS	Ttll4	Arhgef4	-0.104	0.006	14	0.025	24.963	0.109
28	ICS	Elk4	baseline	-0.011	0.007	450	0.717	25.253	0.841
29	ICS	Setmar	baseline	0.046	0.007	453	0.086	21.052	0.403
30	ICS	Slc38a10	baseline	-0.052	0.007	447	0.211	38.101	0.409
31	ICS	Tnfaip1	baseline	-0.078	0.007	452	0.005	21.928	0.165
32	ICS	Ttll4	baseline	-0.089	0.007	449	0.010	27.903	0.137
33	ICS	Setmar	Elk4	0.058	0.006	15	0.154	24.598	0.351

34	ICS	Slc38a10	Elk4	-0.041	0.002	9	0.164	18.562	0.459
35	ICS	Tnfaip1	Elk4	-0.067	0.001	14	0.001	15.009	0.199
36	ICS	Ttll4	Elk4	-0.077	0.001	11	0.002	15.707	0.145
37	ICS	Slc38a10	Setmar	-0.098	0.008	12	0.087	23.665	0.176
38	ICS	Tnfaip1	Setmar	-0.124	0.006	17	0.002	23.484	0.043
39	ICS	Ttll4	Setmar	-0.135	0.007	14	0.006	25.066	0.041
40	ICS	Tnfaip1	Slc38a10	-0.026	0.002	11	0.338	18.542	0.634
41	ICS	Ttll4	Slc38a10	-0.036	0.002	8	0.263	19.113	0.522
42	ICS	Ttll4	Tnfaip1	-0.011	0.001	13	0.580	15.708	0.837
43	MRC_Harwell	baseline	Arhgef4	0.016	0.002	307	0.332	15.095	0.753
44	MRC_Harwell	Elk4	Arhgef4	-0.016	0.004	14	0.604	20.889	0.777
45	MRC_Harwell	Setmar	Arhgef4	0.038	0.002	20	0.074	16.471	0.469
46	MRC_Harwell	Slc38a10	Arhgef4	-0.041	0.005	16	0.250	23.438	0.485
47	MRC_Harwell	Tnfaip1	Arhgef4	0.076	0.002	20	0.001	16.109	0.155
48	MRC_Harwell	Ttll4	Arhgef4	-0.008	0.003	18	0.753	19.280	0.878
49	MRC_Harwell	Elk4	baseline	-0.032	0.002	305	0.085	15.989	0.536
50	MRC_Harwell	Setmar	baseline	0.022	0.002	311	0.105	14.059	0.660
51	MRC_Harwell	Slc38a10	baseline	-0.057	0.002	307	0.001	15.222	0.268
52	MRC_Harwell	Tnfaip1	baseline	0.060	0.002	311	0.000	14.049	0.241
53	MRC_Harwell	Ttll4	baseline	-0.024	0.002	309	0.103	14.513	0.630
54	MRC_Harwell	Setmar	Elk4	0.054	0.002	18	0.017	16.599	0.308
55	MRC_Harwell	Slc38a10	Elk4	-0.025	0.006	14	0.511	23.906	0.677
56	MRC_Harwell	Tnfaip1	Elk4	0.092	0.002	18	0.000	16.137	0.090
57	MRC_Harwell	Ttll4	Elk4	0.008	0.003	16	0.783	19.867	0.889
58	MRC_Harwell	Slc38a10	Setmar	-0.079	0.004	20	0.006	19.295	0.155
59	MRC_Harwell	Tnfaip1	Setmar	0.038	0.001	24	0.005	13.682	0.449
60	MRC_Harwell	Ttll4	Setmar	-0.046	0.002	22	0.020	15.776	0.374
61	MRC_Harwell	Tnfaip1	Slc38a10	0.117	0.003	20	0.000	18.950	0.041
62	MRC_Harwell	Ttll4	Slc38a10	0.033	0.005	18	0.307	22.205	0.564
63	MRC_Harwell	Ttll4	Tnfaip1	-0.084	0.002	22	0.000	15.477	0.114

## 4 ESLIM\_005\_001\_005.DEXA.Bone.Mineral.Content

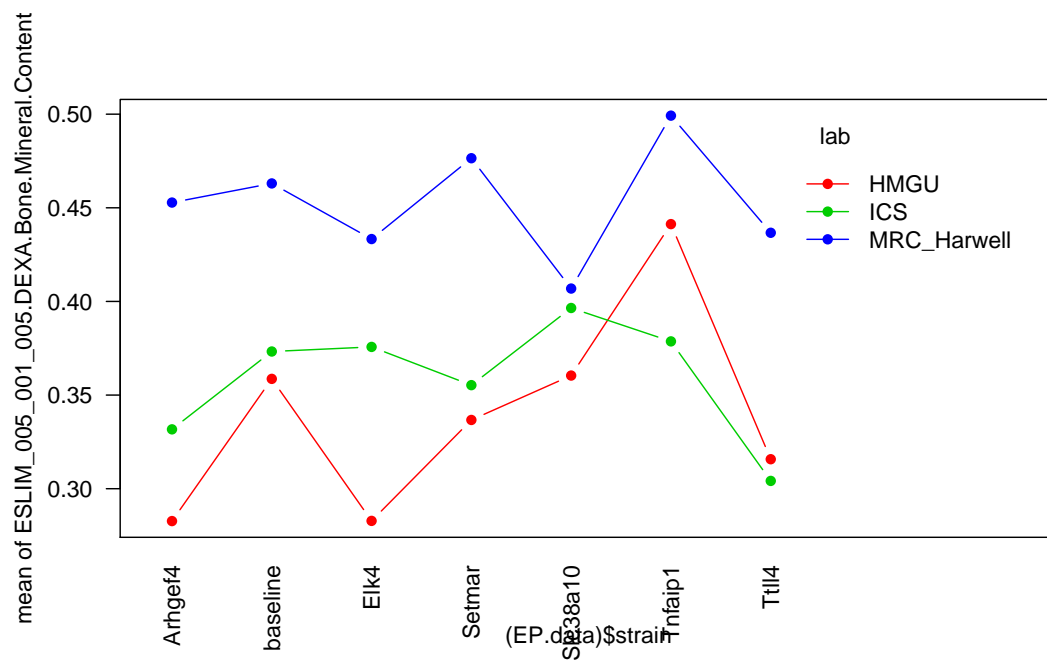
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	307
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	0.2827143	0.09944800	7
2	Arhgef4	ICS	0.3317000	0.06194989	10
3	Arhgef4	MRC_Harwell	0.4528000	0.05119145	9
4	baseline	HMGU	0.3586515	0.12916896	307
5	baseline	ICS	0.3732607	0.07472674	445
6	baseline	MRC_Harwell	0.4630077	0.03868011	300
7	Elk4	HMGU	0.2828182	0.06667806	11
8	Elk4	ICS	0.3757143	0.04769247	7
9	Elk4	MRC_Harwell	0.4333143	0.03647467	7
10	Setmar	HMGU	0.3367143	0.11044563	7
11	Setmar	ICS	0.3553000	0.09698345	10
12	Setmar	MRC_Harwell	0.4764692	0.03216122	13
13	Slc38a10	HMGU	0.3604167	0.12663868	12
14	Slc38a10	ICS	0.3965000	0.10380270	4
15	Slc38a10	MRC_Harwell	0.4068778	0.05302013	9
16	Tnfaip1	HMGU	0.4412857	0.15235891	7
17	Tnfaip1	ICS	0.3786667	0.03856812	9
18	Tnfaip1	MRC_Harwell	0.4992077	0.03435803	13
19	Ttll4	HMGU	0.3157500	0.14425989	4
20	Ttll4	ICS	0.3041667	0.03672284	6
21	Ttll4	MRC_Harwell	0.4366636	0.04241621	11

S2.GxL= 0 S2.GxL/S2.error= 1e-08

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.173	0.029	3.852	0.001	3.645	0.027
lab	2	2.426	1.213	162.350	0.000		
strain:lab	12	0.107	0.009	1.195	0.281		
Residuals	1187	8.867	0.007				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.040	0.020	0.017	0.038
2	Elk4	Arhgef4	-0.001	0.969	0.024	0.970
3	Setmar	Arhgef4	0.035	0.135	0.023	0.161
4	Slc38a10	Arhgef4	0.024	0.315	0.024	0.335
5	Tnfaip1	Arhgef4	0.078	0.001	0.023	0.006
6	Ttll4	Arhgef4	-0.002	0.940	0.025	0.941
7	Elk4	baseline	-0.041	0.019	0.018	0.038
8	Setmar	baseline	-0.005	0.736	0.016	0.742
9	Slc38a10	baseline	-0.016	0.371	0.018	0.390
10	Tnfaip1	baseline	0.038	0.021	0.016	0.039
11	Ttll4	baseline	-0.042	0.028	0.019	0.049

12	Setmar	Elk4	0.036	0.129	0.023	0.156
13	Slc38a10	Elk4	0.025	0.301	0.024	0.322
14	Tnfaip1	Elk4	0.079	0.001	0.024	0.006
15	Ttll4	Elk4	-0.001	0.970	0.026	0.970
16	Slc38a10	Setmar	-0.010	0.661	0.023	0.670
17	Tnfaip1	Setmar	0.043	0.056	0.023	0.080
18	Ttll4	Setmar	-0.037	0.138	0.025	0.164
19	Tnfaip1	Slc38a10	0.053	0.024	0.024	0.043
20	Ttll4	Slc38a10	-0.026	0.305	0.026	0.326
21	Ttll4	Tnfaip1	-0.080	0.001	0.025	0.007

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.076	0.017	312	0.124	312.000	0.124
2	HMGU	Elk4	Arhgef4	0.000	0.006	16	0.998	16.000	0.998
3	HMGU	Setmar	Arhgef4	0.054	0.011	12	0.355	12.000	0.355
4	HMGU	Slc38a10	Arhgef4	0.078	0.014	17	0.183	17.000	0.183
5	HMGU	Tnfaip1	Arhgef4	0.159	0.017	12	0.040	12.000	0.040
6	HMGU	Ttll4	Arhgef4	0.033	0.014	9	0.661	9.000	0.661
7	HMGU	Elk4	baseline	-0.076	0.016	316	0.054	316.000	0.054
8	HMGU	Setmar	baseline	-0.022	0.017	312	0.656	312.000	0.656
9	HMGU	Slc38a10	baseline	0.002	0.017	317	0.963	317.000	0.963
10	HMGU	Tnfaip1	baseline	0.083	0.017	312	0.096	312.000	0.096
11	HMGU	Ttll4	baseline	-0.043	0.017	309	0.510	309.000	0.510
12	HMGU	Setmar	Elk4	0.054	0.007	16	0.212	16.000	0.212
13	HMGU	Slc38a10	Elk4	0.078	0.011	21	0.084	21.000	0.084
14	HMGU	Tnfaip1	Elk4	0.158	0.011	16	0.008	16.000	0.008
15	HMGU	Ttll4	Elk4	0.033	0.008	13	0.545	13.000	0.545
16	HMGU	Slc38a10	Setmar	0.024	0.015	17	0.686	17.000	0.686
17	HMGU	Tnfaip1	Setmar	0.105	0.018	12	0.167	12.000	0.167
18	HMGU	Ttll4	Setmar	-0.021	0.015	9	0.791	9.000	0.791
19	HMGU	Tnfaip1	Slc38a10	0.081	0.019	17	0.229	17.000	0.229
20	HMGU	Ttll4	Slc38a10	-0.045	0.017	14	0.563	14.000	0.563
21	HMGU	Ttll4	Tnfaip1	-0.126	0.022	9	0.214	9.000	0.214
22	ICS	baseline	Arhgef4	0.042	0.006	453	0.082	453.000	0.082
23	ICS	Elk4	Arhgef4	0.044	0.003	15	0.136	15.000	0.136
24	ICS	Setmar	Arhgef4	0.024	0.007	18	0.525	18.000	0.525
25	ICS	Slc38a10	Arhgef4	0.065	0.006	12	0.168	12.000	0.168
26	ICS	Tnfaip1	Arhgef4	0.047	0.003	17	0.067	17.000	0.067
27	ICS	Ttll4	Arhgef4	-0.028	0.003	14	0.343	14.000	0.343
28	ICS	Elk4	baseline	0.002	0.006	450	0.931	450.000	0.931
29	ICS	Setmar	baseline	-0.018	0.006	453	0.456	453.000	0.456
30	ICS	Slc38a10	baseline	0.023	0.006	447	0.537	447.000	0.537
31	ICS	Tnfaip1	baseline	0.005	0.006	452	0.829	452.000	0.829
32	ICS	Ttll4	baseline	-0.069	0.006	449	0.024	449.000	0.024
33	ICS	Setmar	Elk4	-0.020	0.007	15	0.616	15.000	0.616

34	ICS	Slc38a10	Elk4	0.021	0.005	9	0.654	9.000	0.654
35	ICS	Tnfaip1	Elk4	0.003	0.002	14	0.893	14.000	0.893
36	ICS	Ttll4	Elk4	-0.072	0.002	11	0.012	11.000	0.012
37	ICS	Slc38a10	Setmar	0.041	0.010	12	0.494	12.000	0.494
38	ICS	Tnfaip1	Setmar	0.023	0.006	17	0.509	17.000	0.509
39	ICS	Ttll4	Setmar	-0.051	0.007	14	0.241	14.000	0.241
40	ICS	Tnfaip1	Slc38a10	-0.018	0.004	11	0.649	11.000	0.649
41	ICS	Ttll4	Slc38a10	-0.092	0.005	8	0.075	8.000	0.075
42	ICS	Ttll4	Tnfaip1	-0.075	0.001	13	0.003	13.000	0.003
43	MRC_Harwell	baseline	Arhgef4	0.010	0.002	307	0.440	307.000	0.440
44	MRC_Harwell	Elk4	Arhgef4	-0.019	0.002	14	0.409	14.000	0.409
45	MRC_Harwell	Setmar	Arhgef4	0.024	0.002	20	0.197	20.000	0.197
46	MRC_Harwell	Slc38a10	Arhgef4	-0.046	0.003	16	0.080	16.000	0.080
47	MRC_Harwell	Tnfaip1	Arhgef4	0.046	0.002	20	0.019	20.000	0.019
48	MRC_Harwell	Ttll4	Arhgef4	-0.016	0.002	18	0.450	18.000	0.450
49	MRC_Harwell	Elk4	baseline	-0.030	0.001	305	0.045	305.000	0.045
50	MRC_Harwell	Setmar	baseline	0.013	0.001	311	0.217	311.000	0.217
51	MRC_Harwell	Slc38a10	baseline	-0.056	0.002	307	0.000	307.000	0.000
52	MRC_Harwell	Tnfaip1	baseline	0.036	0.001	311	0.001	311.000	0.001
53	MRC_Harwell	Ttll4	baseline	-0.026	0.002	309	0.028	309.000	0.028
54	MRC_Harwell	Setmar	Elk4	0.043	0.001	18	0.014	18.000	0.014
55	MRC_Harwell	Slc38a10	Elk4	-0.026	0.002	14	0.280	14.000	0.280
56	MRC_Harwell	Tnfaip1	Elk4	0.066	0.001	18	0.001	18.000	0.001
57	MRC_Harwell	Ttll4	Elk4	0.003	0.002	16	0.866	16.000	0.866
58	MRC_Harwell	Slc38a10	Setmar	-0.070	0.002	20	0.001	20.000	0.001
59	MRC_Harwell	Tnfaip1	Setmar	0.023	0.001	24	0.094	24.000	0.094
60	MRC_Harwell	Ttll4	Setmar	-0.040	0.001	22	0.016	22.000	0.016
61	MRC_Harwell	Tnfaip1	Slc38a10	0.092	0.002	20	0.000	20.000	0.000
62	MRC_Harwell	Ttll4	Slc38a10	0.030	0.002	18	0.179	18.000	0.179
63	MRC_Harwell	Ttll4	Tnfaip1	-0.063	0.001	22	0.001	22.000	0.001

## 5 ESLIM\_\_005\_\_001\_\_006.DEXA.Body.length

count after filtering

strain	lab	n
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Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Arhgef4	HMGU	7
3	Arhgef4	ICS	10
4	baseline	HMGU	307
5	baseline	ICS	445
6	Elk4	HMGU	11
7	Elk4	ICS	7
8	Entpd1	ICS	9
9	Setmar	HMGU	7
10	Setmar	ICS	10
11	Slc38a10	HMGU	12
12	Slc38a10	ICS	4
13	Sytl1	ICS	7
14	Tnfaip1	HMGU	7
15	Tnfaip1	ICS	9
16	Ttll4	HMGU	4
17	Ttll4	ICS	6

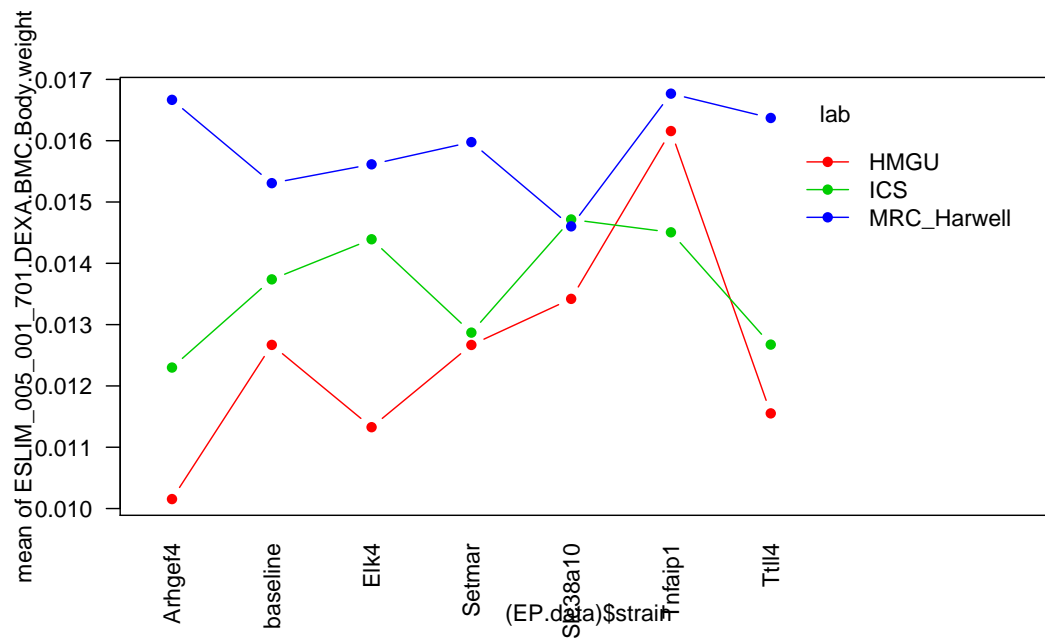
## 6 ESLIM\_005\_001\_701.DEXA.BMC.Body.weight

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	307
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	0.01015431	0.0025549523	7
2	Arhgef4	ICS	0.01229966	0.0024641923	10
3	Arhgef4	MRC_Harwell	0.01666632	0.0013777263	9
4	baseline	HMGU	0.01266935	0.0040437501	307
5	baseline	ICS	0.01373808	0.0022923186	445
6	baseline	MRC_Harwell	0.01530736	0.0012114429	300
7	Elk4	HMGU	0.01132681	0.0022201606	11
8	Elk4	ICS	0.01439225	0.0013311872	7
9	Elk4	MRC_Harwell	0.01561428	0.0007122991	7
10	Setmar	HMGU	0.01266834	0.0032680972	7
11	Setmar	ICS	0.01286933	0.0033121470	10
12	Setmar	MRC_Harwell	0.01597691	0.0008868282	13
13	Slc38a10	HMGU	0.01342003	0.0042643534	12
14	Slc38a10	ICS	0.01471543	0.0025120910	4
15	Slc38a10	MRC_Harwell	0.01460287	0.0013284772	9
16	Tnfaip1	HMGU	0.01615726	0.0045285434	7
17	Tnfaip1	ICS	0.01450574	0.0007818841	9
18	Tnfaip1	MRC_Harwell	0.01676748	0.0008983083	13
19	Ttll4	HMGU	0.01155219	0.0036757012	4
20	Ttll4	ICS	0.01267436	0.0014036708	6
21	Ttll4	MRC_Harwell	0.01637059	0.0008480031	11

S2.GxL= 0 S2.GxL/S2.error= 0.06011829

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.000	0.000	3.345	0.003	1.553	0.243
lab	2	0.001	0.001	95.784	0.000		
strain:lab	12	0.000	0.000	1.913	0.029		
Residuals	1187	0.009	0.000				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.001	0.139	0.001	0.319
2	Elk4	Arhgef4	0.001	0.471	0.001	0.571
3	Setmar	Arhgef4	0.001	0.306	0.001	0.430
4	Slc38a10	Arhgef4	0.001	0.175	0.001	0.299
5	Tnfaip1	Arhgef4	0.003	0.000	0.001	0.016
6	Ttll4	Arhgef4	0.001	0.410	0.001	0.515
7	Elk4	baseline	-0.000	0.649	0.001	0.753
8	Setmar	baseline	-0.000	0.917	0.001	0.945
9	Slc38a10	baseline	0.000	0.671	0.001	0.772
10	Tnfaip1	baseline	0.002	0.001	0.001	0.035
11	Ttll4	baseline	-0.000	0.813	0.001	0.866



12	Setmar	Elk4	0.000	0.788	0.001	0.834
13	Slc38a10	Elk4	0.000	0.529	0.001	0.622
14	Tnfaip1	Elk4	0.002	0.006	0.001	0.049
15	Ttll4	Elk4	0.000	0.893	0.001	0.914
16	Slc38a10	Setmar	0.000	0.697	0.001	0.764
17	Tnfaip1	Setmar	0.002	0.010	0.001	0.064
18	Ttll4	Setmar	-0.000	0.908	0.001	0.927
19	Tnfaip1	Slc38a10	0.002	0.037	0.001	0.124
20	Ttll4	Slc38a10	-0.000	0.641	0.001	0.712
21	Ttll4	Tnfaip1	-0.002	0.014	0.001	0.069

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.003	0.000	312	0.103	129.432	0.164
2	HMGU	Elk4	Arhgef4	0.001	0.000	16	0.318	27.917	0.432
3	HMGU	Setmar	Arhgef4	0.003	0.000	12	0.135	19.529	0.184
4	HMGU	Slc38a10	Arhgef4	0.003	0.000	17	0.085	24.907	0.117
5	HMGU	Tnfaip1	Arhgef4	0.006	0.000	12	0.010	17.130	0.013
6	HMGU	Ttll4	Arhgef4	0.001	0.000	9	0.473	13.421	0.514
7	HMGU	Elk4	baseline	-0.001	0.000	316	0.275	80.619	0.386
8	HMGU	Setmar	baseline	-0.000	0.000	312	0.999	130.083	1.000
9	HMGU	Slc38a10	baseline	0.001	0.000	317	0.529	75.861	0.621
10	HMGU	Tnfaip1	baseline	0.003	0.000	312	0.025	131.621	0.056
11	HMGU	Ttll4	baseline	-0.001	0.000	309	0.583	212.014	0.618
12	HMGU	Setmar	Elk4	0.001	0.000	16	0.313	27.199	0.406
13	HMGU	Slc38a10	Elk4	0.002	0.000	21	0.160	32.349	0.231
14	HMGU	Tnfaip1	Elk4	0.005	0.000	16	0.008	24.970	0.015
15	HMGU	Ttll4	Elk4	0.000	0.000	13	0.886	21.219	0.901
16	HMGU	Slc38a10	Setmar	0.001	0.000	17	0.693	24.327	0.723
17	HMGU	Tnfaip1	Setmar	0.003	0.000	12	0.124	16.501	0.149
18	HMGU	Ttll4	Setmar	-0.001	0.000	9	0.614	12.407	0.640
19	HMGU	Tnfaip1	Slc38a10	0.003	0.000	17	0.204	23.213	0.241
20	HMGU	Ttll4	Slc38a10	-0.002	0.000	14	0.448	18.077	0.476
21	HMGU	Ttll4	Tnfaip1	-0.005	0.000	9	0.119	11.195	0.131
22	ICS	baseline	Arhgef4	0.001	0.000	453	0.051	31.230	0.234
23	ICS	Elk4	Arhgef4	0.002	0.000	15	0.060	26.996	0.143
24	ICS	Setmar	Arhgef4	0.001	0.000	18	0.668	29.516	0.725
25	ICS	Slc38a10	Arhgef4	0.002	0.000	12	0.125	20.337	0.179
26	ICS	Tnfaip1	Arhgef4	0.002	0.000	17	0.020	27.219	0.093
27	ICS	Ttll4	Arhgef4	0.000	0.000	14	0.740	25.764	0.798
28	ICS	Elk4	baseline	0.001	0.000	450	0.452	41.194	0.610
29	ICS	Setmar	baseline	-0.001	0.000	453	0.242	31.662	0.471
30	ICS	Slc38a10	baseline	0.001	0.000	447	0.397	72.295	0.512
31	ICS	Tnfaip1	baseline	0.001	0.000	452	0.317	33.309	0.529
32	ICS	Ttll4	baseline	-0.001	0.000	449	0.258	47.478	0.425
33	ICS	Setmar	Elk4	-0.002	0.000	15	0.270	25.612	0.357

34	ICS	Slc38a10	Elk4	0.000	0.000	9	0.782	18.795	0.828
35	ICS	Tnfaip1	Elk4	0.000	0.000	14	0.834	19.313	0.917
36	ICS	Ttll4	Elk4	-0.002	0.000	11	0.045	22.439	0.167
37	ICS	Slc38a10	Setmar	0.002	0.000	12	0.339	17.701	0.385
38	ICS	Tnfaip1	Setmar	0.002	0.000	17	0.167	28.985	0.274
39	ICS	Ttll4	Setmar	-0.000	0.000	14	0.894	23.402	0.910
40	ICS	Tnfaip1	Slc38a10	-0.000	0.000	11	0.817	22.998	0.872
41	ICS	Ttll4	Slc38a10	-0.002	0.000	8	0.134	16.297	0.203
42	ICS	Ttll4	Tnfaip1	-0.002	0.000	13	0.006	19.880	0.108
43	MRC_Harwell	baseline	Arhgef4	-0.001	0.000	307	0.001	17.115	0.199
44	MRC_Harwell	Elk4	Arhgef4	-0.001	0.000	14	0.089	20.359	0.348
45	MRC_Harwell	Setmar	Arhgef4	-0.001	0.000	20	0.167	18.472	0.519
46	MRC_Harwell	Slc38a10	Arhgef4	-0.002	0.000	16	0.005	22.234	0.081
47	MRC_Harwell	Tnfaip1	Arhgef4	0.000	0.000	20	0.836	18.534	0.924
48	MRC_Harwell	Ttll4	Arhgef4	-0.000	0.000	18	0.562	18.900	0.783
49	MRC_Harwell	Elk4	baseline	0.000	0.000	305	0.505	18.533	0.771
50	MRC_Harwell	Setmar	baseline	0.001	0.000	311	0.050	15.404	0.509
51	MRC_Harwell	Slc38a10	baseline	-0.001	0.000	307	0.087	17.102	0.498
52	MRC_Harwell	Tnfaip1	baseline	0.001	0.000	311	0.000	15.406	0.161
53	MRC_Harwell	Ttll4	baseline	0.001	0.000	309	0.004	16.044	0.304
54	MRC_Harwell	Setmar	Elk4	0.000	0.000	18	0.365	16.254	0.724
55	MRC_Harwell	Slc38a10	Elk4	-0.001	0.000	14	0.091	19.958	0.363
56	MRC_Harwell	Tnfaip1	Elk4	0.001	0.000	18	0.009	16.336	0.271
57	MRC_Harwell	Ttll4	Elk4	0.001	0.000	16	0.068	16.136	0.464
58	MRC_Harwell	Slc38a10	Setmar	-0.001	0.000	20	0.008	18.200	0.204
59	MRC_Harwell	Tnfaip1	Setmar	0.001	0.000	24	0.033	15.477	0.439
60	MRC_Harwell	Ttll4	Setmar	0.000	0.000	22	0.281	15.586	0.698
61	MRC_Harwell	Tnfaip1	Slc38a10	0.002	0.000	20	0.000	18.263	0.053
62	MRC_Harwell	Ttll4	Slc38a10	0.002	0.000	18	0.002	18.589	0.110
63	MRC_Harwell	Ttll4	Tnfaip1	-0.000	0.000	22	0.281	15.639	0.696

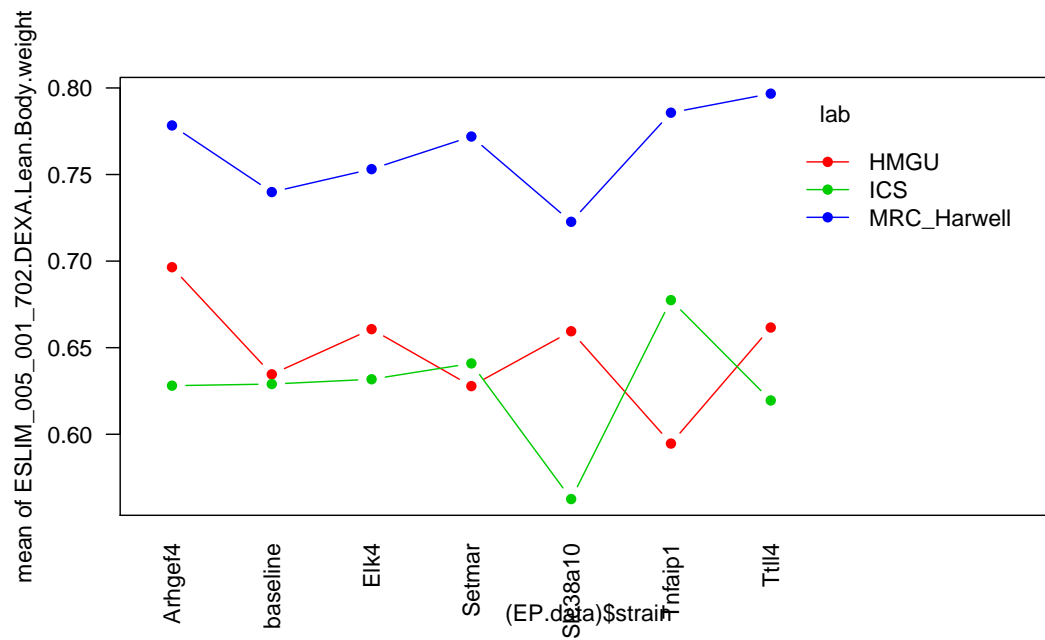
## 7 ESLIM\_005\_001\_702.DEXA.Lean.Body.weight

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	307
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	0.6964723	0.05662917	7
2	Arhgef4	ICS	0.6280440	0.03763771	10
3	Arhgef4	MRC_Harwell	0.7783334	0.04682376	9
4	baseline	HMGU	0.6346152	0.09873024	307
5	baseline	ICS	0.6289898	0.05869750	445
6	baseline	MRC_Harwell	0.7398719	0.04575329	300
7	Elk4	HMGU	0.6607029	0.04001527	11
8	Elk4	ICS	0.6317607	0.03201424	7
9	Elk4	MRC_Harwell	0.7531179	0.03849512	7
10	Setmar	HMGU	0.6278049	0.08200116	7
11	Setmar	ICS	0.6409086	0.06357611	10
12	Setmar	MRC_Harwell	0.7719400	0.02873273	13
13	Slc38a10	HMGU	0.6594776	0.10980862	12
14	Slc38a10	ICS	0.5625560	0.07815787	4
15	Slc38a10	MRC_Harwell	0.7226938	0.03593865	9
16	Tnfaip1	HMGU	0.5946196	0.10617331	7
17	Tnfaip1	ICS	0.6774627	0.04032864	9
18	Tnfaip1	MRC_Harwell	0.7857057	0.04620049	13
19	Ttll4	HMGU	0.6616374	0.09389122	4
20	Ttll4	ICS	0.6195107	0.06390630	6
21	Ttll4	MRC_Harwell	0.7967093	0.05236870	11

S2.GxL= 0.00028 S2.GxL/S2.error= 0.05934176

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.179	0.030	6.271	0.000	0.952	0.495
lab	2	3.116	1.558	327.447	0.000		
strain:lab	12	0.109	0.009	1.908	0.030		
Residuals	1187	5.648	0.005				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.031	0.024	0.019	0.137
2	Elk4	Arhgef4	-0.016	0.409	0.024	0.516
3	Setmar	Arhgef4	-0.016	0.373	0.023	0.490
4	Slc38a10	Arhgef4	-0.041	0.032	0.024	0.111
5	Tnfaip1	Arhgef4	-0.008	0.657	0.023	0.728
6	Ttll4	Arhgef4	-0.002	0.902	0.025	0.922
7	Elk4	baseline	0.015	0.281	0.020	0.459
8	Setmar	baseline	0.015	0.255	0.019	0.456
9	Slc38a10	baseline	-0.010	0.455	0.020	0.610
10	Tnfaip1	baseline	0.023	0.080	0.019	0.255
11	Ttll4	baseline	0.029	0.061	0.021	0.196

12	Setmar	Elk4	-0.001	0.978	0.023	0.983
13	Slc38a10	Elk4	-0.025	0.192	0.024	0.313
14	Tnfaip1	Elk4	0.008	0.683	0.024	0.750
15	Ttll4	Elk4	0.013	0.509	0.025	0.600
16	Slc38a10	Setmar	-0.025	0.181	0.024	0.311
17	Tnfaip1	Setmar	0.008	0.648	0.023	0.725
18	Ttll4	Setmar	0.014	0.476	0.024	0.575
19	Tnfaip1	Slc38a10	0.033	0.078	0.024	0.187
20	Ttll4	Slc38a10	0.039	0.057	0.025	0.148
21	Ttll4	Tnfaip1	0.006	0.769	0.024	0.816

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.062	0.010	312	0.100	117.802	0.166
2	HMGU	Elk4	Arhgef4	-0.036	0.002	16	0.135	27.009	0.286
3	HMGU	Setmar	Arhgef4	-0.069	0.005	12	0.093	20.256	0.139
4	HMGU	Slc38a10	Arhgef4	-0.037	0.009	17	0.422	25.066	0.474
5	HMGU	Tnfaip1	Arhgef4	-0.102	0.007	12	0.045	18.106	0.063
6	HMGU	Ttll4	Arhgef4	-0.035	0.005	9	0.455	13.985	0.502
7	HMGU	Elk4	baseline	0.026	0.009	316	0.383	72.957	0.497
8	HMGU	Setmar	baseline	-0.007	0.010	312	0.856	118.665	0.879
9	HMGU	Slc38a10	baseline	0.025	0.010	317	0.395	69.333	0.511
10	HMGU	Tnfaip1	baseline	-0.040	0.010	312	0.291	119.779	0.372
11	HMGU	Ttll4	baseline	0.027	0.010	309	0.587	198.356	0.624
12	HMGU	Setmar	Elk4	-0.033	0.004	16	0.268	27.948	0.385
13	HMGU	Slc38a10	Elk4	-0.001	0.007	21	0.972	32.658	0.977
14	HMGU	Tnfaip1	Elk4	-0.066	0.005	16	0.077	26.631	0.130
15	HMGU	Ttll4	Elk4	0.001	0.003	13	0.978	23.104	0.982
16	HMGU	Slc38a10	Setmar	0.032	0.010	17	0.518	24.303	0.560
17	HMGU	Tnfaip1	Setmar	-0.033	0.009	12	0.525	17.036	0.561
18	HMGU	Ttll4	Setmar	0.034	0.007	9	0.546	12.478	0.577
19	HMGU	Tnfaip1	Slc38a10	-0.065	0.012	17	0.226	23.484	0.265
20	HMGU	Ttll4	Slc38a10	0.002	0.011	14	0.973	18.024	0.974
21	HMGU	Ttll4	Tnfaip1	0.067	0.010	9	0.323	11.486	0.347
22	ICS	baseline	Arhgef4	0.001	0.003	453	0.960	31.009	0.975
23	ICS	Elk4	Arhgef4	0.004	0.001	15	0.835	23.090	0.901
24	ICS	Setmar	Arhgef4	0.013	0.003	18	0.589	28.588	0.702
25	ICS	Slc38a10	Arhgef4	-0.065	0.003	12	0.050	22.779	0.101
26	ICS	Tnfaip1	Arhgef4	0.049	0.002	17	0.013	23.995	0.110
27	ICS	Ttll4	Arhgef4	-0.009	0.002	14	0.739	25.988	0.807
28	ICS	Elk4	baseline	0.003	0.003	450	0.901	41.370	0.933
29	ICS	Setmar	baseline	0.012	0.003	453	0.526	31.362	0.697
30	ICS	Slc38a10	baseline	-0.066	0.003	447	0.025	73.019	0.084
31	ICS	Tnfaip1	baseline	0.048	0.003	452	0.014	33.615	0.126
32	ICS	Ttll4	baseline	-0.009	0.003	449	0.695	48.135	0.781
33	ICS	Setmar	Elk4	0.009	0.003	15	0.732	26.995	0.798

34	ICS	Slc38a10	Elk4	-0.069	0.003	9	0.063	17.395	0.105
35	ICS	Tnfaip1	Elk4	0.046	0.001	14	0.028	23.631	0.144
36	ICS	Ttll4	Elk4	-0.012	0.002	11	0.663	22.261	0.739
37	ICS	Slc38a10	Setmar	-0.078	0.005	12	0.073	19.558	0.108
38	ICS	Tnfaip1	Setmar	0.037	0.003	17	0.158	28.489	0.296
39	ICS	Ttll4	Setmar	-0.021	0.004	14	0.526	24.616	0.603
40	ICS	Tnfaip1	Slc38a10	0.115	0.003	11	0.004	20.688	0.009
41	ICS	Ttll4	Slc38a10	0.057	0.005	8	0.241	12.460	0.284
42	ICS	Ttll4	Tnfaip1	-0.058	0.003	13	0.049	24.855	0.118
43	MRC_Harwell	baseline	Arhgef4	-0.038	0.002	307	0.014	24.167	0.188
44	MRC_Harwell	Elk4	Arhgef4	-0.025	0.002	14	0.269	25.352	0.443
45	MRC_Harwell	Setmar	Arhgef4	-0.006	0.001	20	0.695	22.622	0.826
46	MRC_Harwell	Slc38a10	Arhgef4	-0.056	0.002	16	0.012	25.196	0.083
47	MRC_Harwell	Tnfaip1	Arhgef4	0.007	0.002	20	0.718	27.042	0.815
48	MRC_Harwell	Ttll4	Arhgef4	0.018	0.002	18	0.424	28.069	0.579
49	MRC_Harwell	Elk4	baseline	0.013	0.002	305	0.448	28.064	0.657
50	MRC_Harwell	Setmar	baseline	0.032	0.002	311	0.013	19.907	0.249
51	MRC_Harwell	Slc38a10	baseline	-0.017	0.002	307	0.266	24.009	0.550
52	MRC_Harwell	Tnfaip1	baseline	0.046	0.002	311	0.000	20.126	0.106
53	MRC_Harwell	Ttll4	baseline	0.057	0.002	309	0.000	21.839	0.052
54	MRC_Harwell	Setmar	Elk4	0.019	0.001	18	0.230	21.369	0.512
55	MRC_Harwell	Slc38a10	Elk4	-0.030	0.001	14	0.126	23.652	0.325
56	MRC_Harwell	Tnfaip1	Elk4	0.033	0.002	18	0.130	26.670	0.309
57	MRC_Harwell	Ttll4	Elk4	0.044	0.002	16	0.077	27.153	0.199
58	MRC_Harwell	Slc38a10	Setmar	-0.049	0.001	20	0.002	20.070	0.088
59	MRC_Harwell	Tnfaip1	Setmar	0.014	0.001	24	0.371	21.837	0.630
60	MRC_Harwell	Ttll4	Setmar	0.025	0.002	22	0.156	23.831	0.404
61	MRC_Harwell	Tnfaip1	Slc38a10	0.063	0.002	20	0.003	25.222	0.046
62	MRC_Harwell	Ttll4	Slc38a10	0.074	0.002	18	0.002	26.719	0.026
63	MRC_Harwell	Ttll4	Tnfaip1	0.011	0.002	22	0.590	27.604	0.727

## 8 ESLIM\_005\_001\_703.DEXA.Fat.Body.weight

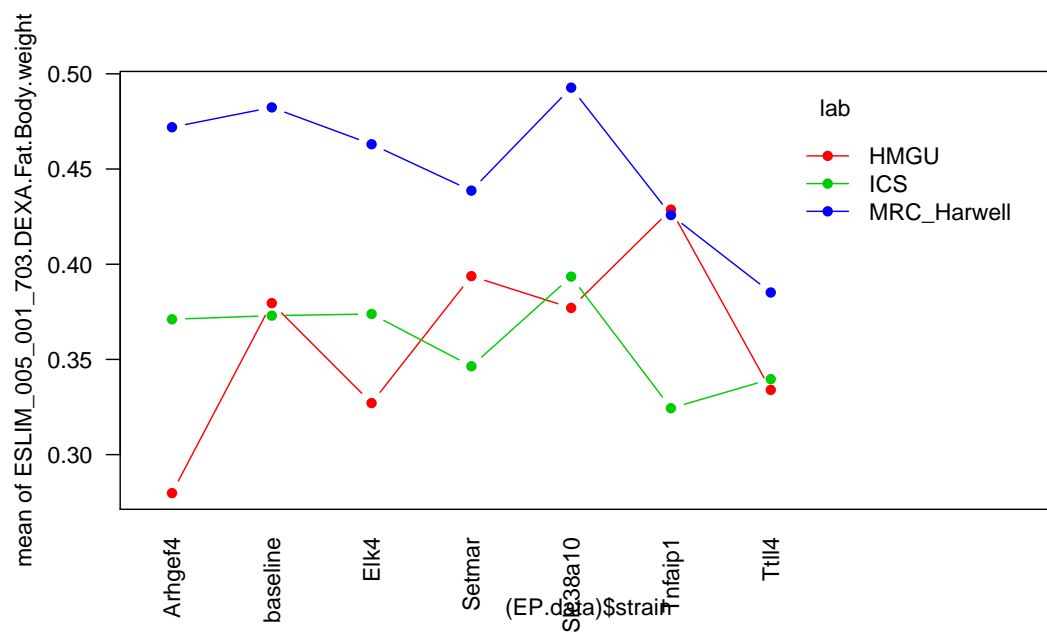
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	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	301
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	10
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	0.2798045	0.10071698	7
2	Arhgef4	ICS	0.3710811	0.04190435	10
3	Arhgef4	MRC_Harwell	0.4719488	0.07890792	9
4	baseline	HMGU	0.3795571	0.12122779	301
5	baseline	ICS	0.3730016	0.07585478	445
6	baseline	MRC_Harwell	0.4823586	0.05785475	300
7	Elk4	HMGU	0.3270709	0.06468910	11
8	Elk4	ICS	0.3738452	0.04070655	7
9	Elk4	MRC_Harwell	0.4630202	0.06929714	7
10	Setmar	HMGU	0.3937507	0.12007153	7
11	Setmar	ICS	0.3463927	0.09172728	10
12	Setmar	MRC_Harwell	0.4386419	0.03666418	13
13	Slc38a10	HMGU	0.3770500	0.15016876	10
14	Slc38a10	ICS	0.3934876	0.10468273	4
15	Slc38a10	MRC_Harwell	0.4927354	0.05462408	9
16	Tnfaip1	HMGU	0.4286883	0.18197526	7
17	Tnfaip1	ICS	0.3243719	0.04330946	9
18	Tnfaip1	MRC_Harwell	0.4258263	0.04642016	13
19	Ttll4	HMGU	0.3339906	0.15369361	4
20	Ttll4	ICS	0.3396491	0.06858800	6
21	Ttll4	MRC_Harwell	0.3851561	0.07944460	11

S2.GxL= 0.00028 S2.GxL/S2.error= 0.0364129

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.085	0.014	1.862	0.084	1.713	0.201
lab	2	2.716	1.358	177.770	0.000		
strain:lab	12	0.148	0.012	1.616	0.081		
Residuals	1179	9.007	0.008				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.033	0.061	0.022	0.167
2	Elk4	Arhgef4	0.005	0.828	0.028	0.853
3	Setmar	Arhgef4	0.010	0.657	0.027	0.709
4	Slc38a10	Arhgef4	0.041	0.101	0.029	0.180
5	Tnfaip1	Arhgef4	0.008	0.750	0.027	0.788
6	Ttll4	Arhgef4	-0.032	0.209	0.029	0.294
7	Elk4	baseline	-0.027	0.123	0.022	0.248
8	Setmar	baseline	-0.022	0.170	0.021	0.318
9	Slc38a10	baseline	0.008	0.646	0.023	0.722
10	Tnfaip1	baseline	-0.025	0.128	0.022	0.267
11	Ttll4	baseline	-0.065	0.001	0.024	0.019

12	Setmar	Elk4	0.005	0.831	0.028	0.857
13	Slc38a10	Elk4	0.036	0.157	0.029	0.241
14	Tnfaip1	Elk4	0.002	0.927	0.028	0.938
15	Ttll4	Elk4	-0.038	0.147	0.030	0.230
16	Slc38a10	Setmar	0.031	0.206	0.028	0.297
17	Tnfaip1	Setmar	-0.003	0.900	0.027	0.916
18	Ttll4	Setmar	-0.043	0.087	0.029	0.163
19	Tnfaip1	Slc38a10	-0.034	0.170	0.028	0.259
20	Ttll4	Slc38a10	-0.073	0.006	0.030	0.032
21	Ttll4	Tnfaip1	-0.040	0.113	0.029	0.193

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.100	0.015	306	0.032	177.738	0.056
2	HMGU	Elk4	Arhgef4	0.047	0.006	16	0.240	25.418	0.307
3	HMGU	Setmar	Arhgef4	0.114	0.012	12	0.078	15.719	0.093
4	HMGU	Slc38a10	Arhgef4	0.097	0.018	15	0.157	18.771	0.178
5	HMGU	Tnfaip1	Arhgef4	0.149	0.022	12	0.083	14.147	0.091
6	HMGU	Ttll4	Arhgef4	0.054	0.015	9	0.493	10.754	0.509
7	HMGU	Elk4	baseline	-0.052	0.014	310	0.155	114.767	0.232
8	HMGU	Setmar	baseline	0.014	0.015	306	0.760	178.608	0.785
9	HMGU	Slc38a10	baseline	-0.003	0.015	309	0.949	131.230	0.956
10	HMGU	Tnfaip1	baseline	0.049	0.015	306	0.296	182.365	0.351
11	HMGU	Ttll4	baseline	-0.046	0.015	303	0.457	256.460	0.488
12	HMGU	Setmar	Elk4	0.067	0.008	16	0.143	24.088	0.189
13	HMGU	Slc38a10	Elk4	0.050	0.013	19	0.326	26.438	0.371
14	HMGU	Tnfaip1	Elk4	0.102	0.015	16	0.106	20.781	0.126
15	HMGU	Ttll4	Elk4	0.007	0.009	13	0.901	17.684	0.908
16	HMGU	Slc38a10	Setmar	-0.017	0.019	15	0.811	18.454	0.820
17	HMGU	Tnfaip1	Setmar	0.035	0.024	12	0.679	13.957	0.690
18	HMGU	Ttll4	Setmar	-0.060	0.017	9	0.489	10.468	0.503
19	HMGU	Tnfaip1	Slc38a10	0.052	0.027	15	0.532	17.521	0.547
20	HMGU	Ttll4	Slc38a10	-0.043	0.023	12	0.639	13.667	0.649
21	HMGU	Ttll4	Tnfaip1	-0.095	0.030	9	0.405	9.856	0.414
22	ICS	baseline	Arhgef4	0.002	0.006	453	0.936	48.587	0.955
23	ICS	Elk4	Arhgef4	0.003	0.002	15	0.894	25.327	0.930
24	ICS	Setmar	Arhgef4	-0.025	0.005	18	0.449	29.738	0.539
25	ICS	Slc38a10	Arhgef4	0.022	0.004	12	0.563	20.164	0.620
26	ICS	Tnfaip1	Arhgef4	-0.047	0.002	17	0.029	25.610	0.140
27	ICS	Ttll4	Arhgef4	-0.031	0.003	14	0.270	25.873	0.393
28	ICS	Elk4	baseline	0.001	0.006	450	0.977	69.916	0.982
29	ICS	Setmar	baseline	-0.027	0.006	453	0.275	49.684	0.437
30	ICS	Slc38a10	baseline	0.020	0.006	447	0.592	132.761	0.649
31	ICS	Tnfaip1	baseline	-0.049	0.006	452	0.056	53.877	0.166
32	ICS	Ttll4	baseline	-0.033	0.006	449	0.285	83.350	0.396
33	ICS	Setmar	Elk4	-0.027	0.006	15	0.472	24.528	0.539

34	ICS	Slc38a10	Elk4	0.020	0.005	9	0.660	14.220	0.696
35	ICS	Tnfaip1	Elk4	-0.049	0.002	14	0.036	25.173	0.132
36	ICS	Ttll4	Elk4	-0.034	0.003	11	0.289	21.100	0.387
37	ICS	Slc38a10	Setmar	0.047	0.009	12	0.419	16.097	0.452
38	ICS	Tnfaip1	Setmar	-0.022	0.005	17	0.521	28.203	0.596
39	ICS	Ttll4	Setmar	-0.007	0.007	14	0.879	21.312	0.893
40	ICS	Tnfaip1	Slc38a10	-0.069	0.004	11	0.109	18.099	0.151
41	ICS	Ttll4	Slc38a10	-0.054	0.007	8	0.350	11.059	0.382
42	ICS	Ttll4	Tnfaip1	0.015	0.003	13	0.603	24.431	0.685
43	MRC_Harwell	baseline	Arhgef4	0.010	0.003	307	0.599	34.128	0.738
44	MRC_Harwell	Elk4	Arhgef4	-0.009	0.006	14	0.817	22.985	0.843
45	MRC_Harwell	Setmar	Arhgef4	-0.033	0.003	20	0.196	30.730	0.339
46	MRC_Harwell	Slc38a10	Arhgef4	0.021	0.005	16	0.525	27.356	0.605
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.046	0.004	20	0.099	31.445	0.205
48	MRC_Harwell	Ttll4	Arhgef4	-0.087	0.006	18	0.025	28.923	0.051
49	MRC_Harwell	Elk4	baseline	-0.019	0.003	305	0.385	41.378	0.554
50	MRC_Harwell	Setmar	baseline	-0.044	0.003	311	0.007	25.739	0.139
51	MRC_Harwell	Slc38a10	baseline	0.010	0.003	307	0.596	33.467	0.737
52	MRC_Harwell	Tnfaip1	baseline	-0.057	0.003	311	0.001	25.892	0.059
53	MRC_Harwell	Ttll4	baseline	-0.097	0.003	309	0.000	29.647	0.003
54	MRC_Harwell	Setmar	Elk4	-0.024	0.002	18	0.312	28.708	0.470
55	MRC_Harwell	Slc38a10	Elk4	0.030	0.004	14	0.353	25.123	0.452
56	MRC_Harwell	Tnfaip1	Elk4	-0.037	0.003	18	0.167	29.626	0.297
57	MRC_Harwell	Ttll4	Elk4	-0.078	0.006	16	0.050	26.053	0.086
58	MRC_Harwell	Slc38a10	Setmar	0.054	0.002	20	0.011	26.435	0.088
59	MRC_Harwell	Tnfaip1	Setmar	-0.013	0.002	24	0.442	23.632	0.660
60	MRC_Harwell	Ttll4	Setmar	-0.053	0.004	22	0.041	31.764	0.127
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.067	0.002	20	0.006	28.530	0.046
62	MRC_Harwell	Ttll4	Slc38a10	-0.108	0.005	18	0.003	29.834	0.010
63	MRC_Harwell	Ttll4	Tnfaip1	-0.041	0.004	22	0.133	32.628	0.256

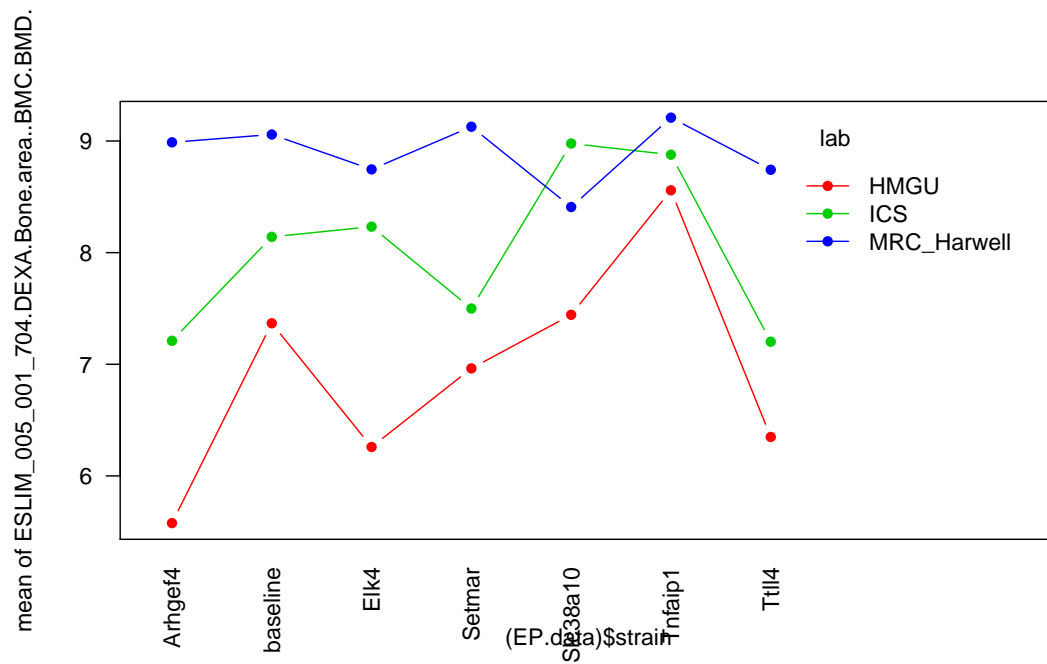
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count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	9
4	baseline	HMGU	307
5	baseline	ICS	445
6	baseline	MRC_Harwell	300
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	4
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	9
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	6
21	Ttll4	MRC_Harwell	11

Animals dropped

	strain	lab	n
1	Aldh2	ICS	6
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	5.577461	2.4343109	7
2	Arhgef4	ICS	7.210400	1.7665401	10
3	Arhgef4	MRC_Harwell	8.988101	0.7224122	9
4	baseline	HMGU	7.367277	2.6178888	307
5	baseline	ICS	8.141283	1.6528757	445
6	baseline	MRC_Harwell	9.058065	0.4817960	300
7	Elk4	HMGU	6.258969	1.5574535	11
8	Elk4	ICS	8.232714	0.8947001	7
9	Elk4	MRC_Harwell	8.745584	0.2607824	7
10	Setmar	HMGU	6.963041	2.3325901	7
11	Setmar	ICS	7.499300	2.3498814	10
12	Setmar	MRC_Harwell	9.127682	0.4174010	13
13	Slc38a10	HMGU	7.443085	2.6635822	12
14	Slc38a10	ICS	8.977500	1.8277583	4
15	Slc38a10	MRC_Harwell	8.408662	0.6656617	9
16	Tnfaip1	HMGU	8.558233	2.8152080	7
17	Tnfaip1	ICS	8.877222	0.7875516	9
18	Tnfaip1	MRC_Harwell	9.209177	0.4522908	13
19	Ttll4	HMGU	6.348770	2.6975160	4
20	Ttll4	ICS	7.202167	0.7463622	6
21	Ttll4	MRC_Harwell	8.742129	0.4295993	11

S2.GxL= 0 S2.GxL/S2.error= 1e-08

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	47.148	7.858	2.498	0.021	2.437	0.089
lab	2	535.150	267.575	85.053	0.000		
strain:lab	12	35.120	2.927	0.930	0.515		
Residuals	1187	3734.292	3.146				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.865	0.014	0.352	0.030
2	Elk4	Arhgef4	0.318	0.522	0.497	0.534
3	Setmar	Arhgef4	0.585	0.218	0.475	0.242
4	Slc38a10	Arhgef4	0.805	0.105	0.497	0.131
5	Tnfaip1	Arhgef4	1.447	0.003	0.479	0.011
6	Ttll4	Arhgef4	0.235	0.652	0.521	0.660
7	Elk4	baseline	-0.546	0.128	0.359	0.154
8	Setmar	baseline	-0.279	0.395	0.329	0.412
9	Slc38a10	baseline	-0.059	0.869	0.360	0.872
10	Tnfaip1	baseline	0.583	0.081	0.334	0.107
11	Ttll4	baseline	-0.630	0.107	0.392	0.134

12	Setmar	Elk4	0.267	0.579	0.481	0.589
13	Slc38a10	Elk4	0.487	0.332	0.502	0.351
14	Tnfaip1	Elk4	1.129	0.020	0.485	0.038
15	Ttll4	Elk4	-0.084	0.873	0.526	0.876
16	Slc38a10	Setmar	0.220	0.647	0.481	0.655
17	Tnfaip1	Setmar	0.862	0.062	0.462	0.087
18	Ttll4	Setmar	-0.351	0.487	0.505	0.500
19	Tnfaip1	Slc38a10	0.642	0.185	0.485	0.210
20	Ttll4	Slc38a10	-0.571	0.277	0.526	0.299
21	Ttll4	Tnfaip1	-1.213	0.017	0.508	0.034

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	1.790	6.836	312	0.074	312.000	0.074
2	HMGU	Elk4	Arhgef4	0.682	3.738	16	0.477	16.000	0.477
3	HMGU	Setmar	Arhgef4	1.386	5.683	12	0.298	12.000	0.298
4	HMGU	Slc38a10	Arhgef4	1.866	6.682	17	0.148	17.000	0.148
5	HMGU	Tnfaip1	Arhgef4	2.981	6.926	12	0.056	12.000	0.056
6	HMGU	Ttll4	Arhgef4	0.771	6.376	9	0.638	9.000	0.638
7	HMGU	Elk4	baseline	-1.108	6.713	316	0.164	316.000	0.164
8	HMGU	Setmar	baseline	-0.404	6.826	312	0.686	312.000	0.686
9	HMGU	Slc38a10	baseline	0.076	6.862	317	0.922	317.000	0.922
10	HMGU	Tnfaip1	baseline	1.191	6.874	312	0.236	312.000	0.236
11	HMGU	Ttll4	baseline	-1.019	6.857	309	0.440	309.000	0.440
12	HMGU	Setmar	Elk4	0.704	3.556	16	0.451	16.000	0.451
13	HMGU	Slc38a10	Elk4	1.184	4.871	21	0.213	21.000	0.213
14	HMGU	Tnfaip1	Elk4	2.299	4.488	16	0.039	16.000	0.039
15	HMGU	Ttll4	Elk4	0.090	3.545	13	0.936	13.000	0.936
16	HMGU	Slc38a10	Setmar	0.480	6.511	17	0.697	17.000	0.697
17	HMGU	Tnfaip1	Setmar	1.595	6.683	12	0.271	12.000	0.271
18	HMGU	Ttll4	Setmar	-0.614	6.053	9	0.700	9.000	0.700
19	HMGU	Tnfaip1	Slc38a10	1.115	7.388	17	0.400	17.000	0.400
20	HMGU	Ttll4	Slc38a10	-1.094	7.134	14	0.490	14.000	0.490
21	HMGU	Ttll4	Tnfaip1	-2.209	7.709	9	0.236	9.000	0.236
22	ICS	baseline	Arhgef4	0.931	2.740	453	0.079	453.000	0.079
23	ICS	Elk4	Arhgef4	1.022	2.193	15	0.182	15.000	0.182
24	ICS	Setmar	Arhgef4	0.289	4.321	18	0.760	18.000	0.760
25	ICS	Slc38a10	Arhgef4	1.767	3.176	12	0.120	12.000	0.120
26	ICS	Tnfaip1	Arhgef4	1.667	1.944	17	0.019	17.000	0.019
27	ICS	Ttll4	Arhgef4	-0.008	2.205	14	0.992	14.000	0.992
28	ICS	Elk4	baseline	0.091	2.706	450	0.884	450.000	0.884
29	ICS	Setmar	baseline	-0.642	2.787	453	0.230	453.000	0.230
30	ICS	Slc38a10	baseline	0.836	2.736	447	0.315	447.000	0.315
31	ICS	Tnfaip1	baseline	0.736	2.695	452	0.184	452.000	0.184
32	ICS	Ttll4	baseline	-0.939	2.708	449	0.166	449.000	0.166
33	ICS	Setmar	Elk4	-0.733	3.633	15	0.447	15.000	0.447



34	ICS	Slc38a10	Elk4	0.745	1.647	9	0.379	9.000	0.379
35	ICS	Tnfaip1	Elk4	0.645	0.697	14	0.148	14.000	0.148
36	ICS	Ttll4	Elk4	-1.031	0.690	11	0.048	11.000	0.048
37	ICS	Slc38a10	Setmar	1.478	4.977	12	0.285	12.000	0.285
38	ICS	Tnfaip1	Setmar	1.378	3.215	17	0.113	17.000	0.113
39	ICS	Ttll4	Setmar	-0.297	3.749	14	0.771	14.000	0.771
40	ICS	Tnfaip1	Slc38a10	-0.100	1.362	11	0.889	11.000	0.889
41	ICS	Ttll4	Slc38a10	-1.775	1.601	8	0.061	8.000	0.061
42	ICS	Ttll4	Tnfaip1	-1.675	0.596	13	0.001	13.000	0.001
43	MRC_Harwell	baseline	Arhgef4	0.070	0.240	307	0.673	307.002	0.673
44	MRC_Harwell	Elk4	Arhgef4	-0.243	0.327	14	0.414	14.000	0.414
45	MRC_Harwell	Setmar	Arhgef4	0.140	0.313	20	0.572	20.000	0.572
46	MRC_Harwell	Slc38a10	Arhgef4	-0.579	0.482	16	0.096	16.000	0.096
47	MRC_Harwell	Tnfaip1	Arhgef4	0.221	0.331	20	0.386	20.000	0.386
48	MRC_Harwell	Ttll4	Arhgef4	-0.246	0.334	18	0.357	18.000	0.357
49	MRC_Harwell	Elk4	baseline	-0.312	0.229	305	0.089	305.001	0.089
50	MRC_Harwell	Setmar	baseline	0.070	0.230	311	0.609	311.002	0.609
51	MRC_Harwell	Slc38a10	baseline	-0.649	0.238	307	0.000	307.002	0.000
52	MRC_Harwell	Tnfaip1	baseline	0.151	0.231	311	0.268	311.002	0.268
53	MRC_Harwell	Ttll4	baseline	-0.316	0.231	309	0.033	309.002	0.033
54	MRC_Harwell	Setmar	Elk4	0.382	0.139	18	0.042	18.000	0.042
55	MRC_Harwell	Slc38a10	Elk4	-0.337	0.282	14	0.229	14.000	0.229
56	MRC_Harwell	Tnfaip1	Elk4	0.464	0.159	18	0.023	18.000	0.023
57	MRC_Harwell	Ttll4	Elk4	-0.003	0.141	16	0.985	16.000	0.985
58	MRC_Harwell	Slc38a10	Setmar	-0.719	0.282	20	0.005	20.000	0.005
59	MRC_Harwell	Tnfaip1	Setmar	0.081	0.189	24	0.637	24.000	0.637
60	MRC_Harwell	Ttll4	Setmar	-0.386	0.179	22	0.037	22.000	0.037
61	MRC_Harwell	Tnfaip1	Slc38a10	0.801	0.300	20	0.003	20.000	0.003
62	MRC_Harwell	Ttll4	Slc38a10	0.333	0.299	18	0.192	18.000	0.192
63	MRC_Harwell	Ttll4	Tnfaip1	-0.467	0.195	22	0.017	22.000	0.017

## 10 ESLIM\_\_007\_\_001\_\_004.Open.field.Whole.arena.permanence.time count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

## Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

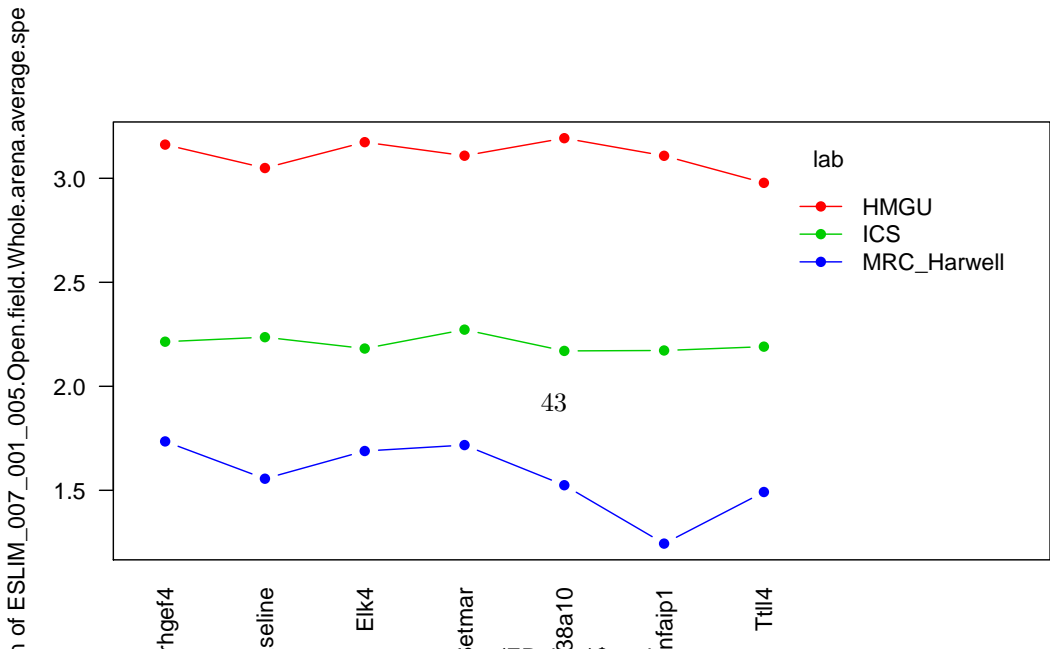
	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

11    ESLIM\_007\_001\_005.Open.field.Whole.arena.average.speed

count after filtering

Animals dropped



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.161990	0.11041350	10
2	Arhgef4	ICS	2.214425	0.04964332	7
3	Arhgef4	MRC_Harwell	1.735044	0.22434995	4
4	baseline	HMGU	3.049389	0.20229133	304
5	baseline	ICS	2.236142	0.06157191	396
6	baseline	MRC_Harwell	1.555678	0.16383441	311
7	Elk4	HMGU	3.173724	0.13517884	7
8	Elk4	ICS	2.181513	0.07601963	7
9	Elk4	MRC_Harwell	1.688897	0.15120561	10
10	Setmar	HMGU	3.108522	0.14961194	7
11	Setmar	ICS	2.272371	0.07202536	7
12	Setmar	MRC_Harwell	1.717458	0.10316785	13
13	Slc38a10	HMGU	3.192882	0.13261243	7
14	Slc38a10	ICS	2.170185	0.05193446	7
15	Slc38a10	MRC_Harwell	1.524429	0.13820730	19
16	Tnfaip1	HMGU	3.108237	0.10373809	7
17	Tnfaip1	ICS	2.172166	0.09514802	8
18	Tnfaip1	MRC_Harwell	1.243692	0.28922255	9
19	Ttll4	HMGU	2.978102	0.04984417	3
20	Ttll4	ICS	2.190635	0.02264548	7
21	Ttll4	MRC_Harwell	1.491816	0.16812740	9

S2.GxL= 0.00699 S2.GxL/S2.error= 0.32268147

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	6.306	1.051	48.555	0.000	1.703	0.203
lab	2	401.487	200.744	9273.876	0.000		
strain:lab	12	1.127	0.094	4.338	0.000		
Residuals	1138	24.633	0.022				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.083	0.010	0.076	0.297
2	Elk4	Arhgef4	-0.013	0.762	0.082	0.874
3	Setmar	Arhgef4	0.007	0.876	0.082	0.936
4	Slc38a10	Arhgef4	-0.071	0.084	0.081	0.400
5	Tnfaip1	Arhgef4	-0.193	0.000	0.082	0.037
6	Ttll4	Arhgef4	-0.138	0.003	0.084	0.129
7	Elk4	baseline	0.070	0.022	0.075	0.369
8	Setmar	baseline	0.090	0.002	0.074	0.250
9	Slc38a10	baseline	0.012	0.637	0.074	0.871
10	Tnfaip1	baseline	-0.109	0.000	0.075	0.169
11	Ttll4	baseline	-0.054	0.111	0.077	0.496

12	Setmar	Elk4	0.020	0.628	0.080	0.807
13	Slc38a10	Elk4	-0.058	0.145	0.080	0.484
14	Tnfaip1	Elk4	-0.179	0.000	0.081	0.046
15	Ttll4	Elk4	-0.124	0.006	0.083	0.160
16	Slc38a10	Setmar	-0.078	0.042	0.079	0.347
17	Tnfaip1	Setmar	-0.199	0.000	0.080	0.029
18	Ttll4	Setmar	-0.144	0.001	0.083	0.106
19	Tnfaip1	Slc38a10	-0.122	0.002	0.080	0.153
20	Ttll4	Slc38a10	-0.067	0.116	0.082	0.433
21	Ttll4	Tnfaip1	0.055	0.223	0.083	0.519

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.113	0.040	312	0.081	20.099	0.413
2	HMGU	Elk4	Arhgef4	0.012	0.015	15	0.847	17.948	0.930
3	HMGU	Setmar	Arhgef4	-0.053	0.016	15	0.408	18.558	0.694
4	HMGU	Slc38a10	Arhgef4	0.031	0.014	15	0.608	17.844	0.818
5	HMGU	Tnfaip1	Arhgef4	-0.054	0.012	15	0.328	16.788	0.684
6	HMGU	Ttll4	Arhgef4	-0.184	0.010	11	0.019	18.863	0.192
7	HMGU	Elk4	baseline	0.124	0.040	309	0.107	24.145	0.387
8	HMGU	Setmar	baseline	0.059	0.041	309	0.443	24.173	0.679
9	HMGU	Slc38a10	baseline	0.143	0.040	309	0.063	24.140	0.319
10	HMGU	Tnfaip1	baseline	0.059	0.040	309	0.444	24.095	0.680
11	HMGU	Ttll4	baseline	-0.071	0.041	305	0.543	45.322	0.670
12	HMGU	Setmar	Elk4	-0.065	0.020	12	0.409	20.506	0.648
13	HMGU	Slc38a10	Elk4	0.019	0.018	12	0.794	19.756	0.891
14	HMGU	Tnfaip1	Elk4	-0.065	0.015	12	0.329	18.547	0.632
15	HMGU	Ttll4	Elk4	-0.196	0.014	8	0.045	19.578	0.190
16	HMGU	Slc38a10	Setmar	0.084	0.020	12	0.286	20.404	0.554
17	HMGU	Tnfaip1	Setmar	-0.000	0.017	12	0.997	19.295	0.998
18	HMGU	Ttll4	Setmar	-0.130	0.017	8	0.190	19.937	0.392
19	HMGU	Tnfaip1	Slc38a10	-0.085	0.014	12	0.208	18.417	0.536
20	HMGU	Ttll4	Slc38a10	-0.215	0.014	8	0.029	19.481	0.150
21	HMGU	Ttll4	Tnfaip1	-0.130	0.009	8	0.078	17.817	0.347
22	ICS	baseline	Arhgef4	0.022	0.004	401	0.354	12.960	0.860
23	ICS	Elk4	Arhgef4	-0.033	0.004	12	0.356	14.008	0.793
24	ICS	Setmar	Arhgef4	0.058	0.004	12	0.105	13.866	0.644
25	ICS	Slc38a10	Arhgef4	-0.044	0.003	12	0.129	13.263	0.721
26	ICS	Tnfaip1	Arhgef4	-0.042	0.006	13	0.311	14.745	0.740
27	ICS	Ttll4	Arhgef4	-0.024	0.001	12	0.271	12.730	0.846
28	ICS	Elk4	baseline	-0.055	0.004	401	0.021	12.972	0.658
29	ICS	Setmar	baseline	0.036	0.004	401	0.125	12.970	0.768
30	ICS	Slc38a10	baseline	-0.066	0.004	401	0.005	12.960	0.593
31	ICS	Tnfaip1	baseline	-0.064	0.004	402	0.004	12.865	0.604
32	ICS	Ttll4	baseline	-0.046	0.004	401	0.052	12.952	0.712
33	ICS	Setmar	Elk4	0.091	0.005	12	0.041	14.658	0.478

34	ICS	Slc38a10	Elk4	-0.011	0.004	12	0.750	14.064	0.928
35	ICS	Tnfaip1	Elk4	-0.009	0.008	13	0.838	15.423	0.942
36	ICS	Ttll4	Elk4	0.009	0.003	12	0.766	13.537	0.941
37	ICS	Slc38a10	Setmar	-0.102	0.004	12	0.010	13.922	0.420
38	ICS	Tnfaip1	Setmar	-0.100	0.007	13	0.041	15.303	0.439
39	ICS	Ttll4	Setmar	-0.082	0.003	12	0.014	13.394	0.513
40	ICS	Tnfaip1	Slc38a10	0.002	0.006	13	0.962	14.793	0.988
41	ICS	Ttll4	Slc38a10	0.020	0.002	12	0.358	12.787	0.867
42	ICS	Ttll4	Tnfaip1	0.018	0.005	13	0.626	14.340	0.884
43	MRC_Harwell	baseline	Arhgef4	-0.179	0.027	313	0.031	26.415	0.225
44	MRC_Harwell	Elk4	Arhgef4	-0.046	0.030	12	0.659	23.497	0.770
45	MRC_Harwell	Setmar	Arhgef4	-0.018	0.019	15	0.825	21.458	0.902
46	MRC_Harwell	Slc38a10	Arhgef4	-0.211	0.024	21	0.021	23.827	0.160
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.491	0.075	11	0.012	20.354	0.024
48	MRC_Harwell	Ttll4	Arhgef4	-0.243	0.034	11	0.051	22.993	0.148
49	MRC_Harwell	Elk4	baseline	0.133	0.027	319	0.012	17.181	0.317
50	MRC_Harwell	Setmar	baseline	0.162	0.026	322	0.000	15.870	0.220
51	MRC_Harwell	Slc38a10	baseline	-0.031	0.026	328	0.416	14.662	0.805
52	MRC_Harwell	Tnfaip1	baseline	-0.312	0.028	318	0.000	18.157	0.029
53	MRC_Harwell	Ttll4	baseline	-0.064	0.027	318	0.250	17.826	0.631
54	MRC_Harwell	Setmar	Elk4	0.029	0.016	21	0.596	16.920	0.828
55	MRC_Harwell	Slc38a10	Elk4	-0.164	0.020	27	0.006	17.544	0.225
56	MRC_Harwell	Tnfaip1	Elk4	-0.445	0.051	17	0.001	26.576	0.009
57	MRC_Harwell	Ttll4	Elk4	-0.197	0.025	17	0.015	20.816	0.171
58	MRC_Harwell	Slc38a10	Setmar	-0.193	0.016	30	0.000	15.620	0.147
59	MRC_Harwell	Tnfaip1	Setmar	-0.474	0.040	20	0.000	24.153	0.004
60	MRC_Harwell	Ttll4	Setmar	-0.226	0.018	20	0.001	17.789	0.104
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.281	0.039	26	0.002	23.225	0.061
62	MRC_Harwell	Ttll4	Slc38a10	-0.033	0.022	26	0.591	18.397	0.808
63	MRC_Harwell	Ttll4	Tnfaip1	0.248	0.056	16	0.041	26.890	0.138

## 12 ESLIM\_007\_001\_006.Open.field.Periphery.distance.travelled

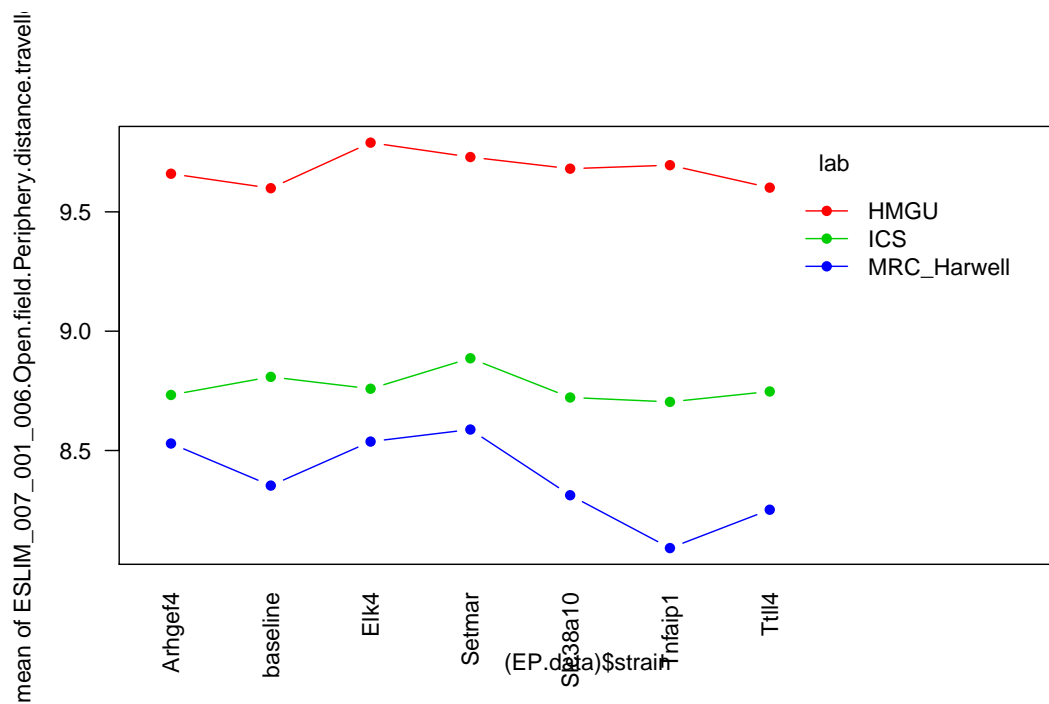
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	9.659772	0.16113524	10
2	Arhgef4	ICS	8.732797	0.06912704	7
3	Arhgef4	MRC_Harwell	8.529339	0.16383125	4
4	baseline	HMGU	9.599174	0.24858145	304
5	baseline	ICS	8.808599	0.12223494	396
6	baseline	MRC_Harwell	8.353002	0.17579792	311
7	Elk4	HMGU	9.790048	0.13108611	7
8	Elk4	ICS	8.758831	0.10988920	7
9	Elk4	MRC_Harwell	8.537432	0.16896300	10
10	Setmar	HMGU	9.729670	0.14319509	7
11	Setmar	ICS	8.886514	0.12772564	7
12	Setmar	MRC_Harwell	8.587922	0.11025343	13
13	Slc38a10	HMGU	9.680975	0.33822131	7
14	Slc38a10	ICS	8.722143	0.11380860	7
15	Slc38a10	MRC_Harwell	8.312578	0.12306824	19
16	Tnfaip1	HMGU	9.695600	0.17131390	7
17	Tnfaip1	ICS	8.703743	0.12522143	8
18	Tnfaip1	MRC_Harwell	8.091141	0.37224780	9
19	Ttll4	HMGU	9.601496	0.05694288	3
20	Ttll4	ICS	8.747423	0.11508590	7
21	Ttll4	MRC_Harwell	8.251929	0.21850976	9

S2.GxL= 0.00523 S2.GxL/S2.error= 0.15569495

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	4.531	0.755	22.471	0.000	2.555	0.079
lab	2	285.963	142.981	4254.292	0.000		
strain:lab	12	1.173	0.098	2.908	0.001		
Residuals	1138	38.247	0.034				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.040	0.319	0.072	0.589
2	Elk4	Arhgef4	0.072	0.189	0.082	0.395
3	Setmar	Arhgef4	0.115	0.032	0.081	0.182
4	Slc38a10	Arhgef4	-0.059	0.249	0.080	0.476
5	Tnfaip1	Arhgef4	-0.136	0.013	0.081	0.120
6	Ttll4	Arhgef4	-0.097	0.096	0.085	0.277
7	Elk4	baseline	0.112	0.003	0.070	0.137
8	Setmar	baseline	0.155	0.000	0.070	0.046
9	Slc38a10	baseline	-0.019	0.563	0.069	0.789
10	Tnfaip1	baseline	-0.096	0.011	0.070	0.197
11	Ttll4	baseline	-0.056	0.185	0.074	0.461

12	Setmar	Elk4	0.043	0.407	0.079	0.599
13	Slc38a10	Elk4	-0.131	0.008	0.078	0.119
14	Tnfaip1	Elk4	-0.208	0.000	0.080	0.022
15	Ttll4	Elk4	-0.169	0.003	0.083	0.065
16	Slc38a10	Setmar	-0.174	0.000	0.077	0.044
17	Tnfaip1	Setmar	-0.251	0.000	0.079	0.008
18	Ttll4	Setmar	-0.211	0.000	0.082	0.024
19	Tnfaip1	Slc38a10	-0.077	0.117	0.078	0.342
20	Ttll4	Slc38a10	-0.038	0.477	0.081	0.653
21	Ttll4	Tnfaip1	0.040	0.482	0.083	0.641

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.061	0.061	312	0.445	30.284	0.643
2	HMGU	Elk4	Arhgef4	0.130	0.022	15	0.098	22.807	0.313
3	HMGU	Setmar	Arhgef4	0.070	0.024	15	0.372	23.236	0.589
4	HMGU	Slc38a10	Arhgef4	0.021	0.061	15	0.864	26.890	0.895
5	HMGU	Tnfaip1	Arhgef4	0.036	0.027	15	0.666	24.241	0.786
6	HMGU	Ttll4	Arhgef4	-0.058	0.022	11	0.561	22.999	0.684
7	HMGU	Elk4	baseline	0.191	0.061	309	0.044	39.975	0.178
8	HMGU	Setmar	baseline	0.130	0.061	309	0.168	40.012	0.354
9	HMGU	Slc38a10	baseline	0.082	0.063	309	0.394	41.051	0.563
10	HMGU	Tnfaip1	baseline	0.096	0.061	309	0.309	40.109	0.493
11	HMGU	Ttll4	baseline	0.002	0.061	305	0.987	92.068	0.990
12	HMGU	Setmar	Elk4	-0.060	0.019	12	0.427	21.762	0.636
13	HMGU	Slc38a10	Elk4	-0.109	0.066	12	0.442	22.202	0.530
14	HMGU	Tnfaip1	Elk4	-0.094	0.023	12	0.269	22.861	0.478
15	HMGU	Ttll4	Elk4	-0.189	0.014	8	0.048	19.978	0.164
16	HMGU	Slc38a10	Setmar	-0.049	0.067	12	0.732	22.066	0.780
17	HMGU	Tnfaip1	Setmar	-0.034	0.025	12	0.694	23.162	0.800
18	HMGU	Ttll4	Setmar	-0.128	0.016	8	0.182	19.952	0.353
19	HMGU	Tnfaip1	Slc38a10	0.015	0.072	12	0.920	21.711	0.935
20	HMGU	Ttll4	Slc38a10	-0.079	0.087	8	0.706	12.059	0.733
21	HMGU	Ttll4	Tnfaip1	-0.094	0.023	8	0.393	19.050	0.527
22	ICS	baseline	Arhgef4	0.076	0.015	401	0.103	17.414	0.509
23	ICS	Elk4	Arhgef4	0.026	0.008	12	0.605	17.243	0.821
24	ICS	Setmar	Arhgef4	0.154	0.011	12	0.016	18.380	0.202
25	ICS	Slc38a10	Arhgef4	-0.011	0.009	12	0.836	17.486	0.927
26	ICS	Tnfaip1	Arhgef4	-0.029	0.011	13	0.596	18.185	0.804
27	ICS	Ttll4	Arhgef4	0.015	0.009	12	0.778	17.567	0.900
28	ICS	Elk4	baseline	-0.050	0.015	401	0.286	17.458	0.663
29	ICS	Setmar	baseline	0.078	0.015	401	0.096	17.483	0.497
30	ICS	Slc38a10	baseline	-0.086	0.015	401	0.064	17.463	0.452
31	ICS	Tnfaip1	baseline	-0.105	0.015	402	0.017	16.754	0.359
32	ICS	Ttll4	baseline	-0.061	0.015	401	0.190	17.465	0.593
33	ICS	Setmar	Elk4	0.128	0.014	12	0.068	20.085	0.302

34	ICS	Slc38a10	Elk4	-0.037	0.013	12	0.551	19.341	0.760
35	ICS	Tnfaip1	Elk4	-0.055	0.014	13	0.385	19.801	0.649
36	ICS	Ttll4	Elk4	-0.011	0.013	12	0.853	19.409	0.924
37	ICS	Slc38a10	Setmar	-0.164	0.015	12	0.026	20.267	0.189
38	ICS	Tnfaip1	Setmar	-0.183	0.016	13	0.015	20.633	0.147
39	ICS	Ttll4	Setmar	-0.139	0.015	12	0.054	20.327	0.264
40	ICS	Tnfaip1	Slc38a10	-0.018	0.014	13	0.772	19.979	0.879
41	ICS	Ttll4	Slc38a10	0.025	0.013	12	0.687	19.608	0.834
42	ICS	Ttll4	Tnfaip1	0.044	0.015	13	0.497	20.038	0.719
43	MRC_Harwell	baseline	Arhgef4	-0.176	0.031	313	0.047	35.844	0.201
44	MRC_Harwell	Elk4	Arhgef4	0.008	0.028	12	0.936	23.977	0.955
45	MRC_Harwell	Setmar	Arhgef4	0.059	0.015	15	0.417	22.058	0.642
46	MRC_Harwell	Slc38a10	Arhgef4	-0.217	0.017	21	0.006	23.351	0.095
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.438	0.108	11	0.049	16.596	0.066
48	MRC_Harwell	Ttll4	Arhgef4	-0.277	0.042	11	0.046	21.868	0.097
49	MRC_Harwell	Elk4	baseline	0.184	0.031	319	0.001	20.337	0.130
50	MRC_Harwell	Setmar	baseline	0.235	0.030	322	0.000	18.156	0.053
51	MRC_Harwell	Slc38a10	baseline	-0.040	0.030	328	0.324	16.140	0.719
52	MRC_Harwell	Tnfaip1	baseline	-0.262	0.034	318	0.000	22.315	0.039
53	MRC_Harwell	Ttll4	baseline	-0.101	0.031	318	0.092	21.522	0.403
54	MRC_Harwell	Setmar	Elk4	0.050	0.019	21	0.396	19.850	0.673
55	MRC_Harwell	Slc38a10	Elk4	-0.225	0.020	27	0.000	19.149	0.068
56	MRC_Harwell	Tnfaip1	Elk4	-0.446	0.080	17	0.003	28.877	0.012
57	MRC_Harwell	Ttll4	Elk4	-0.286	0.038	17	0.005	26.385	0.045
58	MRC_Harwell	Slc38a10	Setmar	-0.275	0.014	30	0.000	16.307	0.024
59	MRC_Harwell	Tnfaip1	Setmar	-0.497	0.063	20	0.000	30.808	0.002
60	MRC_Harwell	Ttll4	Setmar	-0.336	0.026	20	0.000	22.977	0.013
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.221	0.053	26	0.025	30.507	0.120
62	MRC_Harwell	Ttll4	Slc38a10	-0.061	0.025	26	0.354	21.756	0.621
63	MRC_Harwell	Ttll4	Tnfaip1	0.161	0.093	16	0.280	27.050	0.370

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count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

### Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

### Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	71.02000	39.70493	10
2	Arhgef4	ICS	356.02857	113.43653	7
3	Arhgef4	MRC_Harwell	299.66000	77.33969	4
4	baseline	HMGU	98.63092	35.77548	304
5	baseline	ICS	268.25657	77.08883	396
6	baseline	MRC_Harwell	350.32219	85.14566	311
7	Elk4	HMGU	105.20000	21.22923	7
8	Elk4	ICS	259.88571	58.36424	7
9	Elk4	MRC_Harwell	301.65598	61.81877	10
10	Setmar	HMGU	119.35714	45.57173	7
11	Setmar	ICS	274.02857	37.23680	7
12	Setmar	MRC_Harwell	313.43386	56.65353	13
13	Slc38a10	HMGU	94.18571	26.06066	7
14	Slc38a10	ICS	313.31429	76.71400	7
15	Slc38a10	MRC_Harwell	341.22105	55.94970	19
16	Tnfaip1	HMGU	86.64286	22.50429	7
17	Tnfaip1	ICS	264.32500	44.18480	8
18	Tnfaip1	MRC_Harwell	514.06666	83.22992	9
19	Ttll4	HMGU	87.23333	10.28073	3
20	Ttll4	ICS	310.80000	64.67900	7
21	Ttll4	MRC_Harwell	341.00442	93.46983	9

S2.GxL= 2221.598 S2.GxL/S2.error= 0.46194492

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	213597.866	35599.644	7.404	0.000	0.481	0.810
lab	2	11804287.323	5902143.661	1227.494	0.000		
strain:lab	12	293477.558	24456.463	5.086	0.000		
Residuals	1138	5471829.660	4808.286				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-4.960	0.746	41.722	0.907
2	Elk4	Arhgef4	-22.384	0.280	44.066	0.621
3	Setmar	Arhgef4	-9.440	0.640	43.915	0.833
4	Slc38a10	Arhgef4	4.871	0.801	43.748	0.913
5	Tnfaip1	Arhgef4	45.838	0.027	44.029	0.318
6	Ttll4	Arhgef4	3.093	0.888	45.096	0.946
7	Elk4	baseline	-17.424	0.224	41.122	0.679
8	Setmar	baseline	-4.480	0.740	40.955	0.915
9	Slc38a10	baseline	9.832	0.423	40.769	0.814
10	Tnfaip1	baseline	50.798	0.000	41.085	0.240
11	Ttll4	baseline	8.053	0.616	42.198	0.852

12	Setmar	Elk4	12.944	0.506	43.326	0.770
13	Slc38a10	Elk4	27.255	0.143	43.148	0.539
14	Tnfaip1	Elk4	68.222	0.001	43.453	0.142
15	Ttll4	Elk4	25.477	0.232	44.500	0.578
16	Slc38a10	Setmar	14.311	0.427	42.984	0.745
17	Tnfaip1	Setmar	55.278	0.005	43.293	0.226
18	Ttll4	Setmar	12.533	0.546	44.340	0.782
19	Tnfaip1	Slc38a10	40.967	0.028	43.117	0.361
20	Ttll4	Slc38a10	-1.778	0.929	44.163	0.969
21	Ttll4	Tnfaip1	-42.745	0.045	44.466	0.355

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	27.611	1288.441	312	0.017	12.729	0.690
2	HMGU	Elk4	Arhgef4	34.180	1126.161	15	0.056	13.482	0.627
3	HMGU	Setmar	Arhgef4	48.337	1776.602	15	0.034	14.336	0.500
4	HMGU	Slc38a10	Arhgef4	23.166	1217.552	15	0.198	13.602	0.742
5	HMGU	Tnfaip1	Arhgef4	15.623	1148.466	15	0.364	13.511	0.824
6	HMGU	Ttll4	Arhgef4	16.213	1309.066	11	0.510	14.993	0.822
7	HMGU	Elk4	baseline	6.569	1263.784	309	0.629	13.018	0.925
8	HMGU	Setmar	baseline	20.726	1295.359	309	0.133	13.043	0.766
9	HMGU	Slc38a10	baseline	-4.445	1268.220	309	0.744	13.021	0.949
10	HMGU	Tnfaip1	baseline	-11.988	1264.867	309	0.379	13.018	0.863
11	HMGU	Ttll4	baseline	-11.398	1272.185	305	0.582	14.419	0.873
12	HMGU	Setmar	Elk4	14.157	1263.731	12	0.471	13.938	0.841
13	HMGU	Slc38a10	Elk4	-11.014	564.919	12	0.403	12.871	0.874
14	HMGU	Tnfaip1	Elk4	-18.557	478.561	12	0.138	12.738	0.788
15	HMGU	Ttll4	Elk4	-17.967	364.433	8	0.210	12.926	0.796
16	HMGU	Slc38a10	Setmar	-25.171	1377.970	12	0.229	14.110	0.723
17	HMGU	Tnfaip1	Setmar	-32.714	1291.613	12	0.114	13.980	0.644
18	HMGU	Ttll4	Setmar	-32.124	1584.010	8	0.276	15.740	0.662
19	HMGU	Tnfaip1	Slc38a10	-7.543	592.800	12	0.573	12.914	0.913
20	HMGU	Ttll4	Slc38a10	-6.952	535.792	8	0.675	13.352	0.921
21	HMGU	Ttll4	Tnfaip1	0.590	406.255	8	0.967	13.031	0.993
22	ICS	baseline	Arhgef4	-87.772	6046.305	401	0.003	17.198	0.245
23	ICS	Elk4	Arhgef4	-96.143	8137.115	12	0.069	21.859	0.255
24	ICS	Setmar	Arhgef4	-82.000	7127.212	12	0.094	21.090	0.320
25	ICS	Slc38a10	Arhgef4	-42.714	9376.442	12	0.425	22.613	0.618
26	ICS	Tnfaip1	Arhgef4	-91.704	6990.242	13	0.054	20.830	0.262
27	ICS	Ttll4	Arhgef4	-45.229	8525.610	12	0.378	22.117	0.591
28	ICS	Elk4	baseline	-8.371	5904.737	401	0.775	17.066	0.910
29	ICS	Setmar	baseline	5.772	5874.516	401	0.844	17.038	0.938
30	ICS	Slc38a10	baseline	45.058	5941.824	401	0.126	17.100	0.544
31	ICS	Tnfaip1	baseline	-3.932	5873.203	402	0.886	16.373	0.957
32	ICS	Ttll4	baseline	42.543	5916.363	401	0.148	17.077	0.567
33	ICS	Setmar	Elk4	14.143	2396.482	12	0.599	15.613	0.846

34	ICS	Slc38a10	Elk4	53.429	4645.711	12	0.168	18.582	0.491
35	ICS	Tnfaip1	Elk4	4.439	2623.414	13	0.870	15.733	0.951
36	ICS	Ttll4	Elk4	50.914	3794.879	12	0.148	17.527	0.502
37	ICS	Slc38a10	Setmar	39.286	3635.809	12	0.246	17.320	0.602
38	ICS	Tnfaip1	Setmar	-9.704	1691.196	13	0.656	14.433	0.892
39	ICS	Ttll4	Setmar	36.771	2784.976	12	0.217	16.164	0.618
40	ICS	Tnfaip1	Slc38a10	-48.989	3767.408	13	0.147	17.249	0.516
41	ICS	Ttll4	Slc38a10	-2.514	5034.206	12	0.948	19.032	0.974
42	ICS	Ttll4	Tnfaip1	46.475	2982.024	13	0.124	16.218	0.530
43	MRC_Harwell	baseline	Arhgef4	50.662	7237.626	313	0.238	23.786	0.529
44	MRC_Harwell	Elk4	Arhgef4	1.996	4361.527	12	0.960	19.375	0.980
45	MRC_Harwell	Setmar	Arhgef4	13.774	3763.984	15	0.700	18.436	0.857
46	MRC_Harwell	Slc38a10	Arhgef4	41.561	3537.663	21	0.218	17.886	0.583
47	MRC_Harwell	Tnfaip1	Arhgef4	214.407	6669.276	11	0.001	21.609	0.017
48	MRC_Harwell	Ttll4	Arhgef4	41.344	7985.196	11	0.458	22.357	0.634
49	MRC_Harwell	Elk4	baseline	-48.666	7153.062	319	0.074	16.302	0.508
50	MRC_Harwell	Setmar	baseline	-36.888	7099.218	322	0.123	15.260	0.610
51	MRC_Harwell	Slc38a10	baseline	-9.101	7023.717	328	0.646	14.208	0.898
52	MRC_Harwell	Tnfaip1	baseline	163.744	7241.668	318	0.000	16.867	0.038
53	MRC_Harwell	Ttll4	baseline	-9.318	7287.187	318	0.747	16.900	0.899
54	MRC_Harwell	Setmar	Elk4	11.778	3471.882	21	0.640	15.379	0.871
55	MRC_Harwell	Slc38a10	Elk4	39.565	3360.766	27	0.092	14.843	0.583
56	MRC_Harwell	Tnfaip1	Elk4	212.411	5283.047	17	0.000	17.981	0.011
57	MRC_Harwell	Ttll4	Elk4	39.348	6134.524	17	0.289	18.882	0.609
58	MRC_Harwell	Slc38a10	Setmar	27.787	3162.071	30	0.180	14.266	0.696
59	MRC_Harwell	Tnfaip1	Setmar	200.633	4696.661	20	0.000	16.845	0.014
60	MRC_Harwell	Ttll4	Setmar	27.571	5420.417	20	0.398	17.582	0.714
61	MRC_Harwell	Tnfaip1	Slc38a10	172.846	4298.631	26	0.000	15.919	0.028
62	MRC_Harwell	Ttll4	Slc38a10	-0.217	4855.366	26	0.994	16.436	0.998
63	MRC_Harwell	Ttll4	Tnfaip1	-173.062	7831.914	16	0.001	20.844	0.039



## 14 ESLIM\_\_007\_\_001\_\_008.Open.field.Periphery.permanence.time

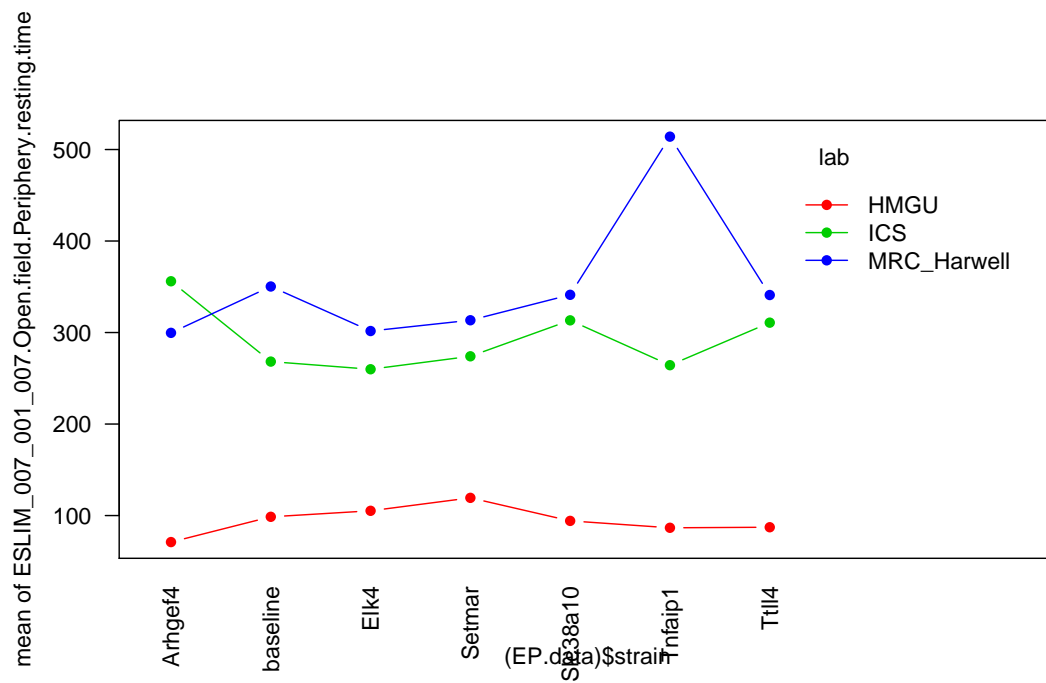
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Warning in RET\$pfunction("adjusted", ...): Completion with error > abseps



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	0.7324212	0.5085519	10
2	Arhgef4	ICS	2.0819266	0.4990604	7
3	Arhgef4	MRC_Harwell	1.8199128	0.4917792	4
4	baseline	HMGU	1.0090625	0.5312042	304
5	baseline	ICS	1.7627210	0.4217560	396
6	baseline	MRC_Harwell	1.7646054	0.5948720	311
7	Elk4	HMGU	1.2040041	0.3004656	7
8	Elk4	ICS	1.6751184	0.1567484	7
9	Elk4	MRC_Harwell	1.9063616	0.4400356	10
10	Setmar	HMGU	1.3778250	0.5487129	7
11	Setmar	ICS	2.0159314	0.2462537	7
12	Setmar	MRC_Harwell	2.1859229	0.3757392	13
13	Slc38a10	HMGU	0.7995650	0.8125407	7
14	Slc38a10	ICS	1.9966560	0.6028959	7
15	Slc38a10	MRC_Harwell	1.5946474	0.4796752	19
16	Tnfaip1	HMGU	1.0201554	0.6578876	7
17	Tnfaip1	ICS	1.5450455	0.3448780	8
18	Tnfaip1	MRC_Harwell	2.2311968	0.6798287	9
19	Ttll4	HMGU	1.0555644	0.1559023	3
20	Ttll4	ICS	1.9754761	0.2954385	7
21	Ttll4	MRC_Harwell	1.4121963	0.7531555	9

S2.GxL= 0.02379 S2.GxL/S2.error= 0.09050754

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	5.119	0.853	3.249	0.004	1.201	0.369
lab	2	141.672	70.836	269.760	0.000		
strain:lab	12	6.245	0.520	1.982	0.023		
Residuals	1138	298.827	0.263				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.009	0.935	0.171	0.958
2	Elk4	Arhgef4	0.078	0.612	0.201	0.706
3	Setmar	Arhgef4	0.347	0.020	0.199	0.107
4	Slc38a10	Arhgef4	-0.080	0.577	0.196	0.691
5	Tnfaip1	Arhgef4	0.087	0.569	0.200	0.671
6	Ttll4	Arhgef4	-0.077	0.636	0.211	0.721
7	Elk4	baseline	0.087	0.412	0.165	0.609
8	Setmar	baseline	0.356	0.000	0.162	0.049
9	Slc38a10	baseline	-0.071	0.437	0.159	0.665
10	Tnfaip1	baseline	0.097	0.362	0.165	0.569
11	Ttll4	baseline	-0.068	0.568	0.176	0.707

12	Setmar	Elk4	0.269	0.062	0.193	0.188
13	Slc38a10	Elk4	-0.157	0.253	0.190	0.423
14	Tnfaip1	Elk4	0.010	0.948	0.195	0.961
15	Ttll4	Elk4	-0.155	0.326	0.204	0.464
16	Slc38a10	Setmar	-0.426	0.001	0.187	0.042
17	Tnfaip1	Setmar	-0.259	0.072	0.192	0.203
18	Ttll4	Setmar	-0.423	0.006	0.202	0.058
19	Tnfaip1	Slc38a10	0.167	0.225	0.190	0.395
20	Ttll4	Slc38a10	0.003	0.985	0.199	0.989
21	Ttll4	Tnfaip1	-0.164	0.297	0.204	0.437

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.277	0.281	312	0.106	30.704	0.326
2	HMGU	Elk4	Arhgef4	0.472	0.191	15	0.045	26.592	0.136
3	HMGU	Setmar	Arhgef4	0.645	0.276	15	0.025	26.909	0.067
4	HMGU	Slc38a10	Arhgef4	0.067	0.419	15	0.836	25.370	0.863
5	HMGU	Tnfaip1	Arhgef4	0.288	0.328	15	0.324	26.464	0.427
6	HMGU	Ttll4	Arhgef4	0.323	0.216	11	0.314	20.233	0.400
7	HMGU	Elk4	baseline	0.195	0.278	309	0.335	40.161	0.515
8	HMGU	Setmar	baseline	0.369	0.283	309	0.071	40.674	0.223
9	HMGU	Slc38a10	baseline	-0.209	0.290	309	0.309	41.553	0.489
10	HMGU	Tnfaip1	baseline	0.011	0.285	309	0.957	40.996	0.971
11	HMGU	Ttll4	baseline	0.047	0.280	305	0.880	92.534	0.902
12	HMGU	Setmar	Elk4	0.174	0.196	12	0.476	23.846	0.594
13	HMGU	Slc38a10	Elk4	-0.404	0.375	12	0.240	20.899	0.316
14	HMGU	Tnfaip1	Elk4	-0.184	0.262	12	0.514	22.873	0.604
15	HMGU	Ttll4	Elk4	-0.148	0.074	8	0.451	19.949	0.611
16	HMGU	Slc38a10	Setmar	-0.578	0.481	12	0.145	19.425	0.194
17	HMGU	Tnfaip1	Setmar	-0.358	0.367	12	0.291	21.032	0.370
18	HMGU	Ttll4	Setmar	-0.322	0.232	8	0.361	14.576	0.431
19	HMGU	Tnfaip1	Slc38a10	0.221	0.547	12	0.587	18.692	0.631
20	HMGU	Ttll4	Slc38a10	0.256	0.501	8	0.614	11.211	0.642
21	HMGU	Ttll4	Tnfaip1	0.035	0.331	8	0.931	12.787	0.939
22	ICS	baseline	Arhgef4	-0.319	0.179	401	0.048	28.454	0.249
23	ICS	Elk4	Arhgef4	-0.407	0.137	12	0.062	23.772	0.180
24	ICS	Setmar	Arhgef4	-0.066	0.155	12	0.759	23.968	0.829
25	ICS	Slc38a10	Arhgef4	-0.085	0.306	12	0.778	22.072	0.819
26	ICS	Tnfaip1	Arhgef4	-0.537	0.179	13	0.029	24.967	0.095
27	ICS	Ttll4	Arhgef4	-0.106	0.168	12	0.636	23.999	0.734
28	ICS	Elk4	baseline	-0.088	0.176	401	0.584	28.087	0.748
29	ICS	Setmar	baseline	0.253	0.176	401	0.114	28.145	0.357
30	ICS	Slc38a10	baseline	0.234	0.181	401	0.150	28.641	0.396
31	ICS	Tnfaip1	baseline	-0.218	0.177	402	0.148	25.897	0.419
32	ICS	Ttll4	baseline	0.213	0.177	401	0.185	28.189	0.438
33	ICS	Setmar	Elk4	0.341	0.043	12	0.009	17.763	0.180

34	ICS	Slc38a10	Elk4	0.322	0.194	12	0.197	23.861	0.327
35	ICS	Tnfaip1	Elk4	-0.130	0.075	13	0.377	20.875	0.623
36	ICS	Ttll4	Elk4	0.300	0.056	12	0.035	19.243	0.248
37	ICS	Slc38a10	Setmar	-0.019	0.212	12	0.939	23.658	0.954
38	ICS	Tnfaip1	Setmar	-0.471	0.092	13	0.010	22.163	0.094
39	ICS	Ttll4	Setmar	-0.040	0.074	12	0.786	20.903	0.879
40	ICS	Tnfaip1	Slc38a10	-0.452	0.232	13	0.093	24.789	0.185
41	ICS	Ttll4	Slc38a10	-0.021	0.225	12	0.935	23.471	0.950
42	ICS	Ttll4	Tnfaip1	0.430	0.104	13	0.023	22.933	0.131
43	MRC_Harwell	baseline	Arhgef4	-0.055	0.353	313	0.853	87.526	0.882
44	MRC_Harwell	Elk4	Arhgef4	0.086	0.206	12	0.753	23.040	0.805
45	MRC_Harwell	Setmar	Arhgef4	0.366	0.161	15	0.132	26.903	0.258
46	MRC_Harwell	Slc38a10	Arhgef4	-0.225	0.232	21	0.405	32.767	0.516
47	MRC_Harwell	Tnfaip1	Arhgef4	0.411	0.402	11	0.304	17.653	0.362
48	MRC_Harwell	Ttll4	Arhgef4	-0.408	0.478	11	0.348	16.730	0.397
49	MRC_Harwell	Elk4	baseline	0.142	0.349	319	0.456	36.294	0.627
50	MRC_Harwell	Setmar	baseline	0.421	0.346	322	0.012	29.681	0.135
51	MRC_Harwell	Slc38a10	baseline	-0.170	0.347	328	0.223	23.624	0.518
52	MRC_Harwell	Tnfaip1	baseline	0.467	0.357	318	0.021	40.256	0.124
53	MRC_Harwell	Ttll4	baseline	-0.352	0.359	318	0.083	40.516	0.243
54	MRC_Harwell	Setmar	Elk4	0.280	0.164	21	0.115	25.625	0.322
55	MRC_Harwell	Slc38a10	Elk4	-0.312	0.218	27	0.099	28.460	0.282
56	MRC_Harwell	Tnfaip1	Elk4	0.325	0.320	17	0.228	29.000	0.346
57	MRC_Harwell	Ttll4	Elk4	-0.494	0.369	17	0.095	28.855	0.174
58	MRC_Harwell	Slc38a10	Setmar	-0.591	0.195	30	0.001	25.244	0.038
59	MRC_Harwell	Tnfaip1	Setmar	0.045	0.270	20	0.843	30.451	0.886
60	MRC_Harwell	Ttll4	Setmar	-0.774	0.312	20	0.005	31.286	0.024
61	MRC_Harwell	Tnfaip1	Slc38a10	0.637	0.301	26	0.008	33.282	0.049
62	MRC_Harwell	Ttll4	Slc38a10	-0.182	0.334	26	0.442	34.433	0.572
63	MRC_Harwell	Ttll4	Tnfaip1	-0.819	0.515	16	0.028	26.067	0.052

## 15 ESLIM\_\_007\_\_001\_\_009.Open.field.Periphery.average.speed

count after filtering

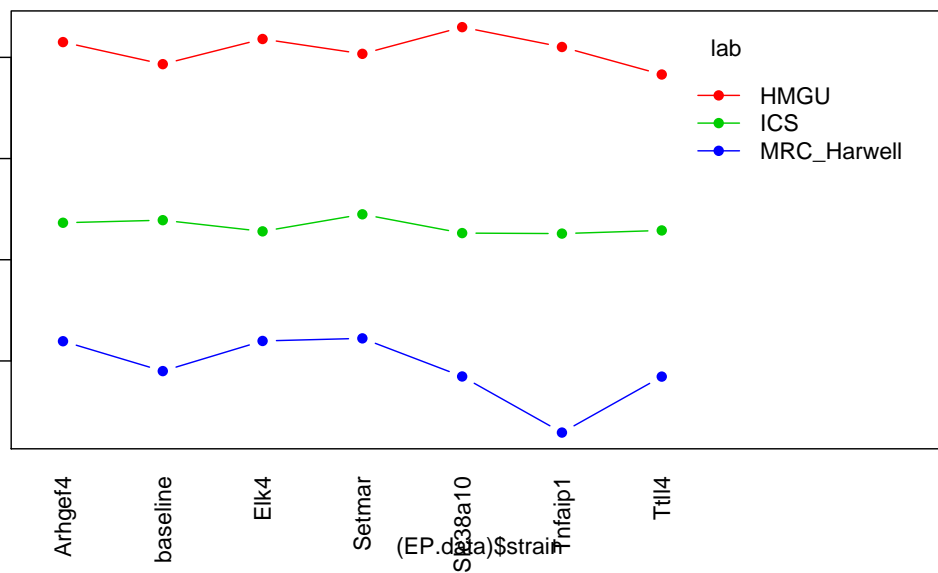
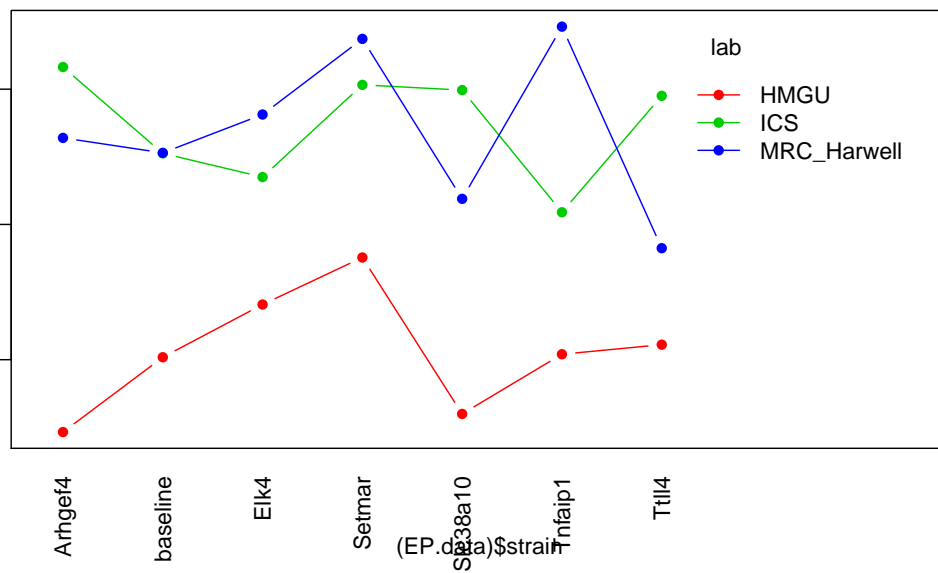
	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Warning in RET\$pfunction("adjusted", ...): Completion with error > abseps

mean of ESLIM\_007\_001\_009.Open.field.Periphery.average.spee.mean of ESLIM\_007\_001\_008.Open.field.Periphery.permanence.tir



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	



	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.075379	0.11981746	10
2	Arhgef4	ICS	2.182842	0.04746617	7
3	Arhgef4	MRC_Harwell	1.597422	0.20735022	4
4	baseline	HMGU	2.966460	0.20424196	304
5	baseline	ICS	2.195535	0.06047717	396
6	baseline	MRC_Harwell	1.449792	0.15742889	311
7	Elk4	HMGU	3.090686	0.15581317	7
8	Elk4	ICS	2.140313	0.07832907	7
9	Elk4	MRC_Harwell	1.598751	0.14147892	10
10	Setmar	HMGU	3.017436	0.17558100	7
11	Setmar	ICS	2.224546	0.07148522	7
12	Setmar	MRC_Harwell	1.611614	0.10412244	13
13	Slc38a10	HMGU	3.149335	0.14632416	7
14	Slc38a10	ICS	2.131736	0.05417399	7
15	Slc38a10	MRC_Harwell	1.423313	0.11046841	19
16	Tnfaip1	HMGU	3.051261	0.08939975	7
17	Tnfaip1	ICS	2.129286	0.08952454	8
18	Tnfaip1	MRC_Harwell	1.146078	0.23893581	9
19	Ttll4	HMGU	2.915309	0.08666997	3
20	Ttll4	ICS	2.144853	0.03086415	7
21	Ttll4	MRC_Harwell	1.422626	0.14989152	9

S2.GxL= 0.00767 S2.GxL/S2.error= 0.36555599

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	6.128	1.021	48.680	0.000	1.345	0.311
lab	2	413.455	206.727	9853.925	0.000		
strain:lab	12	1.235	0.103	4.905	0.000		
Residuals	1138	23.874	0.021				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.076	0.017	0.079	0.353
2	Elk4	Arhgef4	-0.001	0.976	0.084	0.988
3	Setmar	Arhgef4	0.008	0.844	0.084	0.923
4	Slc38a10	Arhgef4	-0.049	0.225	0.084	0.568
5	Tnfaip1	Arhgef4	-0.175	0.000	0.084	0.060
6	Ttll4	Arhgef4	-0.113	0.014	0.087	0.216
7	Elk4	baseline	0.075	0.012	0.078	0.353
8	Setmar	baseline	0.085	0.003	0.077	0.295
9	Slc38a10	baseline	0.027	0.287	0.077	0.729
10	Tnfaip1	baseline	-0.099	0.001	0.078	0.228
11	Ttll4	baseline	-0.037	0.273	0.080	0.654

12	Setmar	Elk4	0.010	0.813	0.083	0.910
13	Slc38a10	Elk4	-0.048	0.219	0.082	0.572
14	Tnfaip1	Elk4	-0.174	0.000	0.083	0.058
15	Ttll4	Elk4	-0.112	0.012	0.085	0.214
16	Slc38a10	Setmar	-0.057	0.127	0.082	0.497
17	Tnfaip1	Setmar	-0.183	0.000	0.083	0.047
18	Ttll4	Setmar	-0.121	0.005	0.085	0.178
19	Tnfaip1	Slc38a10	-0.126	0.001	0.082	0.152
20	Ttll4	Slc38a10	-0.064	0.125	0.085	0.463
21	Ttll4	Tnfaip1	0.062	0.165	0.085	0.482

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.109	0.041	312	0.095	19.468	0.446
2	HMGU	Elk4	Arhgef4	0.015	0.018	15	0.822	18.713	0.915
3	HMGU	Setmar	Arhgef4	-0.058	0.021	15	0.429	19.558	0.690
4	HMGU	Slc38a10	Arhgef4	0.074	0.017	15	0.270	18.330	0.603
5	HMGU	Tnfaip1	Arhgef4	-0.024	0.012	15	0.659	16.447	0.860
6	HMGU	Ttll4	Arhgef4	-0.160	0.013	11	0.057	19.602	0.283
7	HMGU	Elk4	baseline	0.124	0.041	309	0.111	23.186	0.404
8	HMGU	Setmar	baseline	0.051	0.042	309	0.513	23.225	0.731
9	HMGU	Slc38a10	baseline	0.183	0.041	309	0.019	23.168	0.224
10	HMGU	Tnfaip1	baseline	0.085	0.041	309	0.274	23.088	0.567
11	HMGU	Ttll4	baseline	-0.051	0.041	305	0.665	42.416	0.767
12	HMGU	Setmar	Elk4	-0.073	0.028	12	0.425	21.749	0.635
13	HMGU	Slc38a10	Elk4	0.059	0.023	12	0.482	20.646	0.696
14	HMGU	Tnfaip1	Elk4	-0.039	0.016	12	0.572	18.615	0.783
15	HMGU	Ttll4	Elk4	-0.175	0.020	8	0.111	19.979	0.280
16	HMGU	Slc38a10	Setmar	0.132	0.026	12	0.153	21.441	0.392
17	HMGU	Tnfaip1	Setmar	0.034	0.019	12	0.658	19.674	0.817
18	HMGU	Ttll4	Setmar	-0.102	0.025	8	0.377	19.887	0.543
19	HMGU	Tnfaip1	Slc38a10	-0.098	0.015	12	0.156	18.113	0.492
20	HMGU	Ttll4	Slc38a10	-0.234	0.018	8	0.035	19.852	0.146
21	HMGU	Ttll4	Tnfaip1	-0.136	0.008	8	0.057	17.054	0.339
22	ICS	baseline	Arhgef4	0.013	0.004	401	0.581	12.841	0.921
23	ICS	Elk4	Arhgef4	-0.043	0.004	12	0.243	13.864	0.746
24	ICS	Setmar	Arhgef4	0.042	0.004	12	0.223	13.638	0.750
25	ICS	Slc38a10	Arhgef4	-0.051	0.003	12	0.085	13.157	0.693
26	ICS	Tnfaip1	Arhgef4	-0.054	0.005	13	0.181	14.234	0.685
27	ICS	Ttll4	Arhgef4	-0.038	0.002	12	0.101	12.716	0.767
28	ICS	Elk4	baseline	-0.055	0.004	401	0.018	12.855	0.668
29	ICS	Setmar	baseline	0.029	0.004	401	0.210	12.851	0.822
30	ICS	Slc38a10	baseline	-0.064	0.004	401	0.006	12.843	0.621
31	ICS	Tnfaip1	baseline	-0.066	0.004	402	0.003	12.756	0.607
32	ICS	Ttll4	baseline	-0.051	0.004	401	0.028	12.836	0.694
33	ICS	Setmar	Elk4	0.084	0.006	12	0.057	14.486	0.528

34	ICS	Slc38a10	Elk4	-0.009	0.005	12	0.816	14.013	0.948
35	ICS	Tnfaip1	Elk4	-0.011	0.007	13	0.805	14.967	0.934
36	ICS	Ttll4	Elk4	0.005	0.004	12	0.889	13.577	0.972
37	ICS	Slc38a10	Setmar	-0.093	0.004	12	0.018	13.788	0.482
38	ICS	Tnfaip1	Setmar	-0.095	0.007	13	0.042	14.775	0.478
39	ICS	Ttll4	Setmar	-0.080	0.003	12	0.019	13.351	0.542
40	ICS	Tnfaip1	Slc38a10	-0.002	0.006	13	0.951	14.364	0.985
41	ICS	Ttll4	Slc38a10	0.013	0.002	12	0.588	12.868	0.919
42	ICS	Ttll4	Tnfaip1	0.016	0.005	13	0.670	13.987	0.906
43	MRC_Harwell	baseline	Arhgef4	-0.148	0.025	313	0.064	23.770	0.326
44	MRC_Harwell	Elk4	Arhgef4	0.001	0.026	12	0.989	22.484	0.993
45	MRC_Harwell	Setmar	Arhgef4	0.014	0.017	15	0.853	20.264	0.923
46	MRC_Harwell	Slc38a10	Arhgef4	-0.174	0.017	21	0.023	19.927	0.237
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.451	0.053	11	0.008	22.453	0.024
48	MRC_Harwell	Ttll4	Arhgef4	-0.175	0.028	11	0.110	22.419	0.285
49	MRC_Harwell	Elk4	baseline	0.149	0.025	319	0.003	16.294	0.281
50	MRC_Harwell	Setmar	baseline	0.162	0.024	322	0.000	15.226	0.237
51	MRC_Harwell	Slc38a10	baseline	-0.026	0.024	328	0.471	14.194	0.840
52	MRC_Harwell	Tnfaip1	baseline	-0.304	0.026	318	0.000	16.992	0.038
53	MRC_Harwell	Ttll4	baseline	-0.027	0.025	318	0.610	16.809	0.843
54	MRC_Harwell	Setmar	Elk4	0.013	0.015	21	0.804	16.170	0.925
55	MRC_Harwell	Slc38a10	Elk4	-0.175	0.015	27	0.001	15.646	0.205
56	MRC_Harwell	Tnfaip1	Elk4	-0.453	0.037	17	0.000	23.209	0.007
57	MRC_Harwell	Ttll4	Elk4	-0.176	0.021	17	0.017	18.880	0.226
58	MRC_Harwell	Slc38a10	Setmar	-0.188	0.012	30	0.000	14.424	0.168
59	MRC_Harwell	Tnfaip1	Setmar	-0.466	0.029	20	0.000	20.586	0.004
60	MRC_Harwell	Ttll4	Setmar	-0.189	0.015	20	0.002	16.630	0.180
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.277	0.026	26	0.000	18.917	0.062
62	MRC_Harwell	Ttll4	Slc38a10	-0.001	0.015	26	0.989	16.059	0.996
63	MRC_Harwell	Ttll4	Tnfaip1	0.277	0.040	16	0.010	23.870	0.088

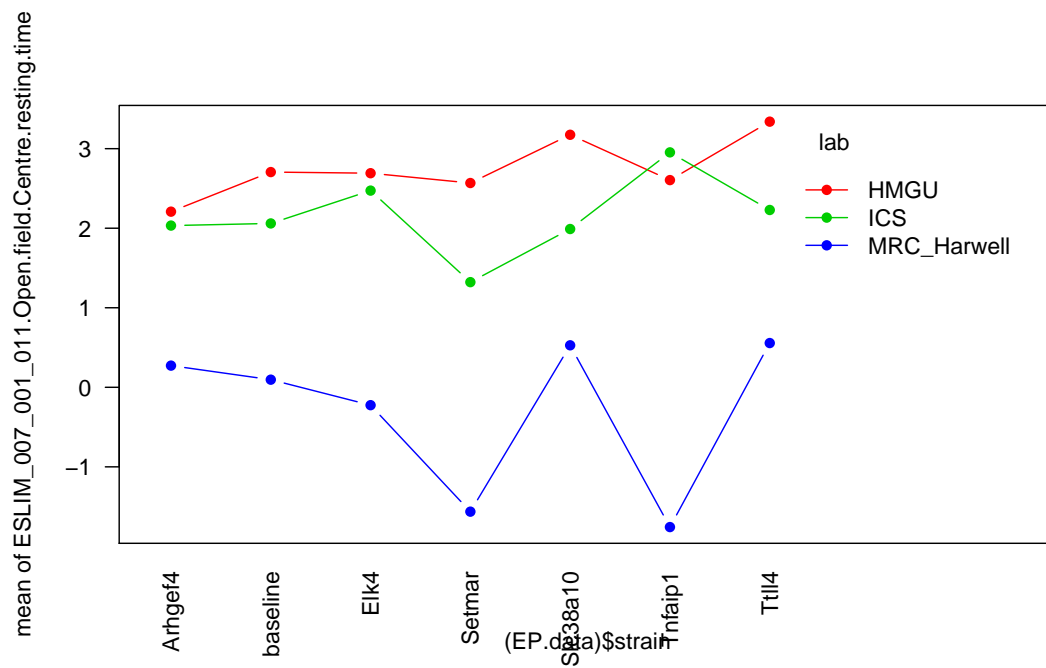
## 16 ESLIM\_007\_001\_011.Open.field.Centre.resting.time

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	2.20817492	1.0315886	10
2	Arhgef4	ICS	2.03316108	1.3836154	7
3	Arhgef4	MRC_Harwell	0.27254501	0.4817443	4
4	baseline	HMGU	2.70587396	1.2245128	304
5	baseline	ICS	2.06013970	0.9853367	396
6	baseline	MRC_Harwell	0.09598587	1.7844035	311
7	Elk4	HMGU	2.69163165	0.4125452	7
8	Elk4	ICS	2.47289199	0.3096502	7
9	Elk4	MRC_Harwell	-0.22461442	1.7017807	10
10	Setmar	HMGU	2.56813800	0.8211041	7
11	Setmar	ICS	1.32202233	1.2360167	7
12	Setmar	MRC_Harwell	-1.56336162	1.5502044	13
13	Slc38a10	HMGU	3.17482650	0.8484363	7
14	Slc38a10	ICS	1.98996251	1.4215866	7
15	Slc38a10	MRC_Harwell	0.52788145	1.3747134	19
16	Tnfaip1	HMGU	2.60490846	1.3193700	7
17	Tnfaip1	ICS	2.95364121	1.0668380	8
18	Tnfaip1	MRC_Harwell	-1.75731493	1.8447874	9
19	Ttll4	HMGU	3.33980281	0.2774870	3
20	Ttll4	ICS	2.22912936	0.6939686	7
21	Ttll4	MRC_Harwell	0.55625583	0.8256510	9

S2.GxL= 0.18468 S2.GxL/S2.error= 0.10396061

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	60.517	10.086	5.679	0.000	1.525	0.251
lab	2	1431.291	715.645	402.978	0.000		
strain:lab	12	48.605	4.050	2.281	0.007		
Residuals	1138	2020.965	1.776				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.206	0.483	0.464	0.665
2	Elk4	Arhgef4	0.226	0.571	0.538	0.682
3	Setmar	Arhgef4	-0.700	0.071	0.532	0.213
4	Slc38a10	Arhgef4	0.548	0.141	0.526	0.318
5	Tnfaip1	Arhgef4	-0.178	0.655	0.537	0.746
6	Ttll4	Arhgef4	0.623	0.140	0.563	0.290
7	Elk4	baseline	0.020	0.942	0.447	0.965
8	Setmar	baseline	-0.906	0.001	0.441	0.062
9	Slc38a10	baseline	0.342	0.147	0.432	0.444
10	Tnfaip1	baseline	-0.384	0.163	0.446	0.406
11	Ttll4	baseline	0.417	0.177	0.476	0.398

12	Setmar	Elk4	-0.926	0.013	0.517	0.098
13	Slc38a10	Elk4	0.322	0.367	0.509	0.539
14	Tnfaip1	Elk4	-0.404	0.294	0.522	0.454
15	Ttll4	Elk4	0.397	0.332	0.547	0.482
16	Slc38a10	Setmar	1.248	0.000	0.503	0.029
17	Tnfaip1	Setmar	0.522	0.163	0.516	0.332
18	Ttll4	Setmar	1.323	0.001	0.541	0.031
19	Tnfaip1	Slc38a10	-0.727	0.042	0.509	0.179
20	Ttll4	Slc38a10	0.075	0.846	0.534	0.891
21	Ttll4	Tnfaip1	0.801	0.050	0.546	0.168

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.498	1.487	312	0.205	23.895	0.498
2	HMGU	Elk4	Arhgef4	0.483	0.707	15	0.261	21.950	0.518
3	HMGU	Setmar	Arhgef4	0.360	0.908	15	0.455	23.816	0.644
4	HMGU	Slc38a10	Arhgef4	0.967	0.926	15	0.060	23.960	0.222
5	HMGU	Tnfaip1	Arhgef4	0.397	1.335	15	0.497	26.176	0.638
6	HMGU	Ttll4	Arhgef4	1.132	0.885	11	0.095	22.912	0.205
7	HMGU	Elk4	baseline	-0.014	1.474	309	0.976	29.681	0.985
8	HMGU	Setmar	baseline	-0.138	1.483	309	0.768	29.822	0.858
9	HMGU	Slc38a10	baseline	0.469	1.484	309	0.315	29.834	0.545
10	HMGU	Tnfaip1	baseline	-0.101	1.504	309	0.830	30.119	0.896
11	HMGU	Ttll4	baseline	0.634	1.490	305	0.371	62.209	0.499
12	HMGU	Setmar	Elk4	-0.123	0.422	12	0.728	19.083	0.862
13	HMGU	Slc38a10	Elk4	0.483	0.445	12	0.200	19.386	0.501
14	HMGU	Tnfaip1	Elk4	-0.087	0.955	12	0.871	23.472	0.915
15	HMGU	Ttll4	Elk4	0.648	0.147	8	0.040	16.109	0.343
16	HMGU	Slc38a10	Setmar	0.607	0.697	12	0.199	22.026	0.430
17	HMGU	Tnfaip1	Setmar	0.037	1.207	12	0.951	23.972	0.966
18	HMGU	Ttll4	Setmar	0.772	0.525	8	0.161	19.999	0.339
19	HMGU	Tnfaip1	Slc38a10	-0.570	1.230	12	0.355	23.985	0.508
20	HMGU	Ttll4	Slc38a10	0.165	0.559	8	0.757	19.970	0.838
21	HMGU	Ttll4	Tnfaip1	0.735	1.325	8	0.382	16.369	0.473
22	ICS	baseline	Arhgef4	0.027	0.985	401	0.943	23.005	0.970
23	ICS	Elk4	Arhgef4	0.440	1.005	12	0.428	23.630	0.592
24	ICS	Setmar	Arhgef4	-0.711	1.721	12	0.331	23.525	0.451
25	ICS	Slc38a10	Arhgef4	-0.043	1.968	12	0.955	23.014	0.965
26	ICS	Tnfaip1	Arhgef4	0.920	1.496	13	0.170	25.000	0.304
27	ICS	Ttll4	Arhgef4	0.196	1.198	12	0.743	23.965	0.818
28	ICS	Elk4	baseline	0.413	0.958	401	0.269	22.657	0.568
29	ICS	Setmar	baseline	-0.738	0.979	401	0.051	22.931	0.313
30	ICS	Slc38a10	baseline	-0.070	0.987	401	0.853	23.026	0.923
31	ICS	Tnfaip1	baseline	0.894	0.974	402	0.012	21.353	0.217
32	ICS	Ttll4	baseline	0.169	0.964	401	0.652	22.731	0.815
33	ICS	Setmar	Elk4	-1.151	0.812	12	0.034	22.809	0.151

34	ICS	Slc38a10	Elk4	-0.483	1.058	12	0.397	23.764	0.561
35	ICS	Tnfaip1	Elk4	0.481	0.657	13	0.272	21.628	0.522
36	ICS	Ttll4	Elk4	-0.244	0.289	12	0.413	17.106	0.721
37	ICS	Slc38a10	Setmar	0.668	1.774	12	0.367	23.423	0.483
38	ICS	Tnfaip1	Setmar	1.632	1.318	13	0.017	24.902	0.066
39	ICS	Ttll4	Setmar	0.907	1.005	12	0.116	23.628	0.274
40	ICS	Tnfaip1	Slc38a10	0.964	1.546	13	0.158	24.993	0.287
41	ICS	Ttll4	Slc38a10	0.239	1.251	12	0.696	23.994	0.781
42	ICS	Ttll4	Tnfaip1	-0.725	0.835	13	0.150	23.111	0.357
43	MRC_Harwell	baseline	Arhgef4	-0.177	3.156	313	0.844	101.818	0.871
44	MRC_Harwell	Elk4	Arhgef4	-0.497	2.230	12	0.584	21.279	0.648
45	MRC_Harwell	Setmar	Arhgef4	-1.836	1.969	15	0.037	26.321	0.080
46	MRC_Harwell	Slc38a10	Arhgef4	0.255	1.653	21	0.722	32.476	0.786
47	MRC_Harwell	Tnfaip1	Arhgef4	-2.030	2.538	11	0.058	18.846	0.090
48	MRC_Harwell	Ttll4	Arhgef4	0.284	0.559	11	0.541	21.648	0.711
49	MRC_Harwell	Elk4	baseline	-0.321	3.176	319	0.576	41.521	0.703
50	MRC_Harwell	Setmar	baseline	-1.659	3.155	322	0.001	33.467	0.043
51	MRC_Harwell	Slc38a10	baseline	0.432	3.113	328	0.301	25.746	0.563
52	MRC_Harwell	Tnfaip1	baseline	-1.853	3.190	318	0.002	45.709	0.036
53	MRC_Harwell	Ttll4	baseline	0.460	3.121	318	0.442	44.807	0.592
54	MRC_Harwell	Setmar	Elk4	-1.339	2.614	21	0.062	32.104	0.152
55	MRC_Harwell	Slc38a10	Elk4	0.752	2.225	27	0.208	32.138	0.378
56	MRC_Harwell	Tnfaip1	Elk4	-1.533	3.135	17	0.077	28.635	0.142
57	MRC_Harwell	Ttll4	Elk4	0.781	1.854	17	0.229	28.398	0.378
58	MRC_Harwell	Slc38a10	Setmar	2.091	2.095	30	0.000	29.702	0.014
59	MRC_Harwell	Tnfaip1	Setmar	-0.194	2.803	20	0.792	31.814	0.839
60	MRC_Harwell	Ttll4	Setmar	2.120	1.715	20	0.001	28.886	0.016
61	MRC_Harwell	Tnfaip1	Slc38a10	-2.285	2.355	26	0.001	33.358	0.013
62	MRC_Harwell	Ttll4	Slc38a10	0.028	1.518	26	0.955	27.780	0.971
63	MRC_Harwell	Ttll4	Tnfaip1	2.314	2.042	16	0.003	27.954	0.017



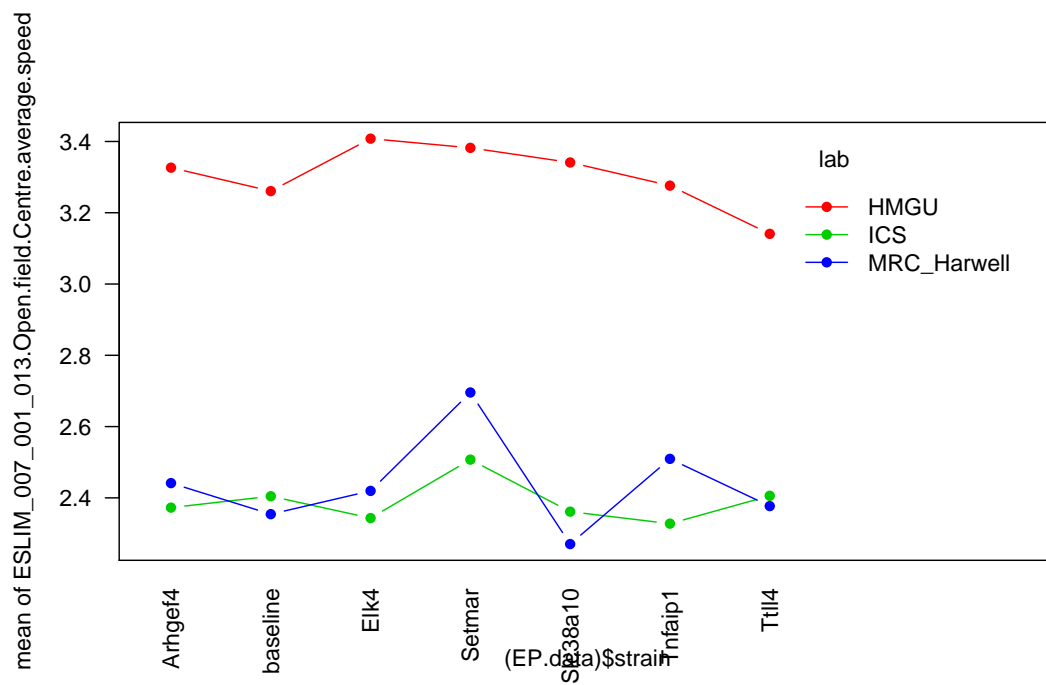
## 17 ESLIM\_007\_001\_013.Open.field.Centre.average.speed

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.326521	0.13858686	10
2	Arhgef4	ICS	2.372607	0.11525613	7
3	Arhgef4	MRC_Harwell	2.441380	0.26086474	4
4	baseline	HMGU	3.260799	0.24489266	304
5	baseline	ICS	2.404582	0.09199548	396
6	baseline	MRC_Harwell	2.354221	0.30024773	311
7	Elk4	HMGU	3.407949	0.10544589	7
8	Elk4	ICS	2.343310	0.08391208	7
9	Elk4	MRC_Harwell	2.419525	0.27795810	10
10	Setmar	HMGU	3.382131	0.13094722	7
11	Setmar	ICS	2.507304	0.11847351	7
12	Setmar	MRC_Harwell	2.695686	0.16377238	13
13	Slc38a10	HMGU	3.341088	0.18620548	7
14	Slc38a10	ICS	2.361323	0.10259145	7
15	Slc38a10	MRC_Harwell	2.270297	0.33798823	19
16	Tnfaip1	HMGU	3.276096	0.17771210	7
17	Tnfaip1	ICS	2.327651	0.12110168	8
18	Tnfaip1	MRC_Harwell	2.509462	0.26664205	9
19	Ttll4	HMGU	3.140762	0.07677183	3
20	Ttll4	ICS	2.405783	0.05719847	7
21	Ttll4	MRC_Harwell	2.376942	0.19468285	9

S2.GxL= 0.00239 S2.GxL/S2.error= 0.04979975

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	2.605	0.434	9.025	0.000	2.588	0.076
lab	2	187.577	93.789	1949.301	0.000		
strain:lab	12	0.943	0.079	1.634	0.077		
Residuals	1138	54.754	0.048				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.040	0.407	0.063	0.539
2	Elk4	Arhgef4	0.009	0.896	0.078	0.914
3	Setmar	Arhgef4	0.166	0.009	0.077	0.051
4	Slc38a10	Arhgef4	-0.079	0.199	0.075	0.315
5	Tnfaip1	Arhgef4	-0.006	0.930	0.077	0.942
6	Ttll4	Arhgef4	-0.053	0.445	0.082	0.529
7	Elk4	baseline	0.049	0.283	0.061	0.437
8	Setmar	baseline	0.206	0.000	0.059	0.004
9	Slc38a10	baseline	-0.039	0.319	0.057	0.511
10	Tnfaip1	baseline	0.034	0.448	0.060	0.580
11	Ttll4	baseline	-0.013	0.798	0.066	0.846

12	Setmar	Elk4	0.157	0.011	0.074	0.054
13	Slc38a10	Elk4	-0.087	0.138	0.072	0.250
14	Tnfaip1	Elk4	-0.014	0.821	0.075	0.852
15	Ttll4	Elk4	-0.062	0.360	0.079	0.451
16	Slc38a10	Setmar	-0.245	0.000	0.071	0.005
17	Tnfaip1	Setmar	-0.172	0.005	0.074	0.038
18	Ttll4	Setmar	-0.219	0.001	0.078	0.016
19	Tnfaip1	Slc38a10	0.073	0.215	0.072	0.332
20	Ttll4	Slc38a10	0.026	0.685	0.076	0.743
21	Ttll4	Tnfaip1	-0.047	0.482	0.079	0.560

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.066	0.059	312	0.400	58.139	0.531
2	HMGU	Elk4	Arhgef4	0.081	0.016	15	0.211	25.781	0.390
3	HMGU	Setmar	Arhgef4	0.056	0.018	15	0.418	26.428	0.568
4	HMGU	Slc38a10	Arhgef4	0.015	0.025	15	0.855	26.994	0.890
5	HMGU	Tnfaip1	Arhgef4	-0.050	0.024	15	0.520	26.997	0.629
6	HMGU	Ttll4	Arhgef4	-0.186	0.017	11	0.052	21.650	0.105
7	HMGU	Elk4	baseline	0.147	0.059	309	0.114	83.630	0.207
8	HMGU	Setmar	baseline	0.121	0.059	309	0.193	83.806	0.298
9	HMGU	Slc38a10	baseline	0.080	0.059	309	0.390	84.319	0.491
10	HMGU	Tnfaip1	baseline	0.015	0.059	309	0.870	84.229	0.895
11	HMGU	Ttll4	baseline	-0.120	0.060	305	0.397	191.207	0.447
12	HMGU	Setmar	Elk4	-0.026	0.014	12	0.692	23.828	0.786
13	HMGU	Slc38a10	Elk4	-0.067	0.023	12	0.425	23.439	0.536
14	HMGU	Tnfaip1	Elk4	-0.132	0.021	12	0.117	23.657	0.219
15	HMGU	Ttll4	Elk4	-0.267	0.010	8	0.004	19.292	0.013
16	HMGU	Slc38a10	Setmar	-0.041	0.026	12	0.642	22.945	0.714
17	HMGU	Tnfaip1	Setmar	-0.106	0.024	12	0.228	23.207	0.338
18	HMGU	Ttll4	Setmar	-0.241	0.014	8	0.019	17.440	0.038
19	HMGU	Tnfaip1	Slc38a10	-0.065	0.033	12	0.517	21.668	0.592
20	HMGU	Ttll4	Slc38a10	-0.200	0.027	8	0.118	13.704	0.157
21	HMGU	Ttll4	Tnfaip1	-0.135	0.025	8	0.251	14.165	0.313
22	ICS	baseline	Arhgef4	0.032	0.009	401	0.365	18.987	0.685
23	ICS	Elk4	Arhgef4	-0.029	0.010	12	0.597	22.640	0.741
24	ICS	Setmar	Arhgef4	0.135	0.014	12	0.052	23.753	0.162
25	ICS	Slc38a10	Arhgef4	-0.011	0.012	12	0.850	23.330	0.902
26	ICS	Tnfaip1	Arhgef4	-0.045	0.014	13	0.476	24.370	0.631
27	ICS	Ttll4	Arhgef4	0.033	0.008	12	0.508	21.529	0.699
28	ICS	Elk4	baseline	-0.061	0.008	401	0.081	18.902	0.439
29	ICS	Setmar	baseline	0.103	0.009	401	0.004	18.997	0.202
30	ICS	Slc38a10	baseline	-0.043	0.008	401	0.219	18.949	0.584
31	ICS	Tnfaip1	baseline	-0.077	0.009	402	0.020	18.075	0.329
32	ICS	Ttll4	baseline	0.001	0.008	401	0.973	18.851	0.988
33	ICS	Setmar	Elk4	0.164	0.011	12	0.011	22.815	0.076

34	ICS	Slc38a10	Elk4	0.018	0.009	12	0.725	21.867	0.835
35	ICS	Tnfaip1	Elk4	-0.016	0.011	13	0.779	23.276	0.861
36	ICS	Ttll4	Elk4	0.062	0.005	12	0.130	18.745	0.440
37	ICS	Slc38a10	Setmar	-0.146	0.012	12	0.030	23.442	0.122
38	ICS	Tnfaip1	Setmar	-0.180	0.014	13	0.013	24.459	0.065
39	ICS	Ttll4	Setmar	-0.102	0.009	12	0.064	21.783	0.246
40	ICS	Tnfaip1	Slc38a10	-0.034	0.013	13	0.574	23.969	0.713
41	ICS	Ttll4	Slc38a10	0.044	0.007	12	0.336	20.447	0.595
42	ICS	Ttll4	Tnfaip1	0.078	0.009	13	0.144	22.261	0.371
43	MRC_Harwell	baseline	Arhgef4	-0.087	0.090	313	0.564	212.913	0.600
44	MRC_Harwell	Elk4	Arhgef4	-0.022	0.075	12	0.895	16.240	0.903
45	MRC_Harwell	Setmar	Arhgef4	0.254	0.035	15	0.031	24.750	0.057
46	MRC_Harwell	Slc38a10	Arhgef4	-0.171	0.108	21	0.354	26.621	0.384
47	MRC_Harwell	Tnfaip1	Arhgef4	0.068	0.070	11	0.677	15.052	0.701
48	MRC_Harwell	Ttll4	Arhgef4	-0.064	0.046	11	0.627	16.950	0.665
49	MRC_Harwell	Elk4	baseline	0.065	0.090	319	0.498	90.618	0.583
50	MRC_Harwell	Setmar	baseline	0.341	0.088	322	0.000	67.712	0.003
51	MRC_Harwell	Slc38a10	baseline	-0.084	0.091	328	0.241	49.208	0.403
52	MRC_Harwell	Tnfaip1	baseline	0.155	0.090	318	0.126	100.919	0.208
53	MRC_Harwell	Ttll4	baseline	0.023	0.089	318	0.822	99.915	0.853
54	MRC_Harwell	Setmar	Elk4	0.276	0.048	21	0.007	32.996	0.023
55	MRC_Harwell	Slc38a10	Elk4	-0.149	0.102	27	0.242	38.066	0.302
56	MRC_Harwell	Tnfaip1	Elk4	0.090	0.074	17	0.483	25.581	0.535
57	MRC_Harwell	Ttll4	Elk4	-0.043	0.059	17	0.707	26.968	0.748
58	MRC_Harwell	Slc38a10	Setmar	-0.425	0.079	30	0.000	41.786	0.001
59	MRC_Harwell	Tnfaip1	Setmar	-0.186	0.045	20	0.055	31.983	0.114
60	MRC_Harwell	Ttll4	Setmar	-0.319	0.031	20	0.000	31.269	0.004
61	MRC_Harwell	Tnfaip1	Slc38a10	0.239	0.101	26	0.074	36.592	0.110
62	MRC_Harwell	Ttll4	Slc38a10	0.107	0.091	26	0.390	37.108	0.452
63	MRC_Harwell	Ttll4	Tnfaip1	-0.133	0.054	16	0.246	25.780	0.317

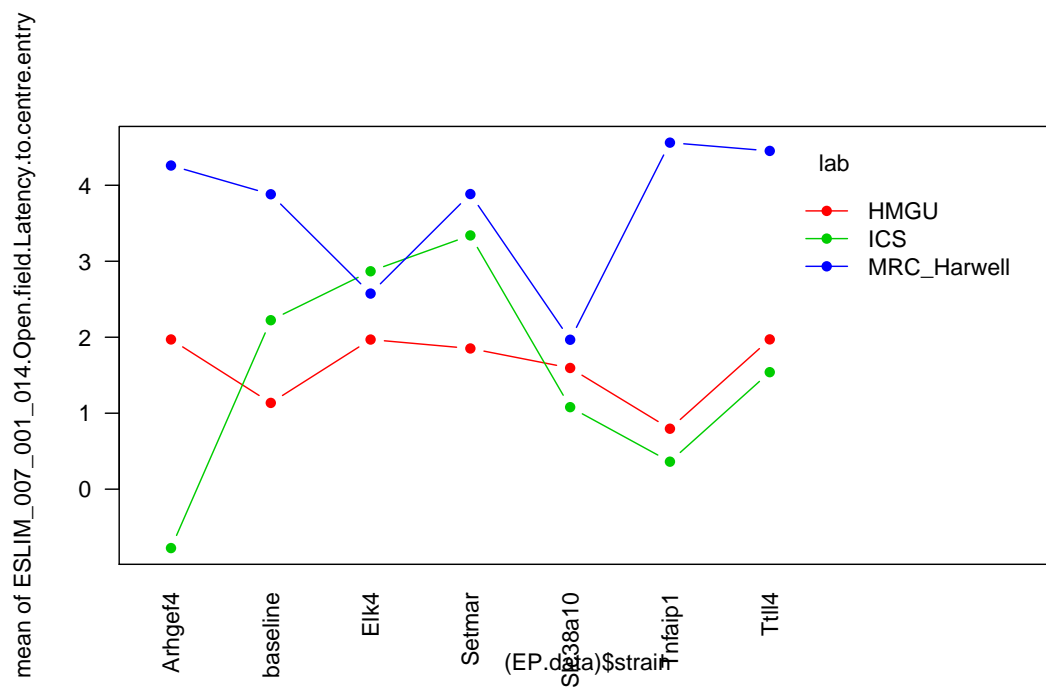
## 18 ESLIM\_\_007\_\_001\_\_014.Open.field.Latency.to.centre.entry

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	1.9705843	1.2219420	10
2	Arhgef4	ICS	-0.7753668	2.3105280	7
3	Arhgef4	MRC_Harwell	4.2596671	0.8611686	4
4	baseline	HMGU	1.1355101	1.3491130	304
5	baseline	ICS	2.2239234	1.7707212	396
6	baseline	MRC_Harwell	3.8815470	1.9115085	311
7	Elk4	HMGU	1.9692138	1.0137197	7
8	Elk4	ICS	2.8680409	1.3412448	7
9	Elk4	MRC_Harwell	2.5744967	2.3321676	10
10	Setmar	HMGU	1.8520084	0.7988750	7
11	Setmar	ICS	3.3396851	0.4121468	7
12	Setmar	MRC_Harwell	3.8844482	1.1147116	13
13	Slc38a10	HMGU	1.5951163	1.0763000	7
14	Slc38a10	ICS	1.0793150	3.2957809	7
15	Slc38a10	MRC_Harwell	1.9667829	3.1495130	19
16	Tnfaip1	HMGU	0.7956513	1.4539886	7
17	Tnfaip1	ICS	0.3617442	2.8346551	8
18	Tnfaip1	MRC_Harwell	4.5609930	0.8350333	9
19	Ttll4	HMGU	1.9716377	0.5944462	3
20	Ttll4	ICS	1.5399284	2.5333169	7
21	Ttll4	MRC_Harwell	4.4522291	1.0391549	9

S2.GxL= 0.84309 S2.GxL/S2.error= 0.27973464

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	60.951	10.159	3.371	0.003	0.721	0.641
lab	2	1249.576	624.788	207.346	0.000		
strain:lab	12	153.955	12.830	4.258	0.000		
Residuals	1138	3429.093	3.013				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.655	0.087	0.850	0.456
2	Elk4	Arhgef4	0.672	0.195	0.921	0.479
3	Setmar	Arhgef4	1.247	0.014	0.916	0.198
4	Slc38a10	Arhgef4	-0.275	0.570	0.911	0.768
5	Tnfaip1	Arhgef4	0.172	0.740	0.920	0.855
6	Ttll4	Arhgef4	0.926	0.092	0.950	0.349
7	Elk4	baseline	0.017	0.961	0.833	0.984
8	Setmar	baseline	0.592	0.080	0.827	0.488
9	Slc38a10	baseline	-0.930	0.003	0.821	0.279
10	Tnfaip1	baseline	-0.483	0.178	0.832	0.572
11	Ttll4	baseline	0.271	0.501	0.863	0.759



12	Setmar	Elk4	0.575	0.238	0.900	0.535
13	Slc38a10	Elk4	-0.948	0.042	0.894	0.310
14	Tnfaip1	Elk4	-0.500	0.318	0.904	0.590
15	Ttll4	Elk4	0.253	0.635	0.933	0.791
16	Slc38a10	Setmar	-1.523	0.001	0.888	0.112
17	Tnfaip1	Setmar	-1.075	0.027	0.899	0.255
18	Ttll4	Setmar	-0.322	0.536	0.928	0.735
19	Tnfaip1	Slc38a10	0.447	0.337	0.893	0.625
20	Ttll4	Slc38a10	1.201	0.016	0.922	0.217
21	Ttll4	Tnfaip1	0.754	0.158	0.932	0.434

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.835	1.811	312	0.054	14.803	0.551
2	HMGU	Elk4	Arhgef4	-0.001	1.307	15	0.998	16.476	0.999
3	HMGU	Setmar	Arhgef4	-0.119	1.151	15	0.826	15.958	0.934
4	HMGU	Slc38a10	Arhgef4	-0.375	1.359	15	0.523	16.648	0.795
5	HMGU	Tnfaip1	Arhgef4	-1.175	1.742	15	0.091	17.875	0.429
6	HMGU	Ttll4	Arhgef4	0.001	1.286	11	0.999	18.980	0.999
7	HMGU	Elk4	baseline	0.834	1.805	309	0.106	16.032	0.559
8	HMGU	Setmar	baseline	0.716	1.797	309	0.163	16.014	0.615
9	HMGU	Slc38a10	baseline	0.460	1.807	309	0.372	16.039	0.746
10	HMGU	Tnfaip1	baseline	-0.340	1.826	309	0.511	16.083	0.811
11	HMGU	Ttll4	baseline	0.836	1.810	305	0.285	22.129	0.587
12	HMGU	Setmar	Elk4	-0.117	0.833	12	0.814	15.321	0.934
13	HMGU	Slc38a10	Elk4	-0.374	1.093	12	0.516	16.298	0.795
14	HMGU	Tnfaip1	Elk4	-1.174	1.571	12	0.105	17.966	0.432
15	HMGU	Ttll4	Elk4	0.002	0.859	8	0.997	17.026	0.999
16	HMGU	Slc38a10	Setmar	-0.257	0.898	12	0.621	15.570	0.856
17	HMGU	Tnfaip1	Setmar	-1.056	1.376	12	0.118	17.308	0.474
18	HMGU	Ttll4	Setmar	0.120	0.567	8	0.824	15.553	0.933
19	HMGU	Tnfaip1	Slc38a10	-0.799	1.636	12	0.265	18.179	0.593
20	HMGU	Ttll4	Slc38a10	0.377	0.957	8	0.592	17.452	0.800
21	HMGU	Ttll4	Tnfaip1	1.176	1.674	8	0.224	19.493	0.464
22	ICS	baseline	Arhgef4	2.999	3.168	401	0.000	19.409	0.054
23	ICS	Elk4	Arhgef4	3.643	3.569	12	0.004	22.627	0.037
24	ICS	Setmar	Arhgef4	4.115	2.754	12	0.001	21.197	0.016
25	ICS	Slc38a10	Arhgef4	1.855	8.100	12	0.246	23.422	0.363
26	ICS	Tnfaip1	Arhgef4	1.137	6.791	13	0.414	25.000	0.549
27	ICS	Ttll4	Arhgef4	2.315	5.878	12	0.099	24.000	0.219
28	ICS	Elk4	baseline	0.644	3.115	401	0.339	19.271	0.665
29	ICS	Setmar	baseline	1.116	3.091	401	0.097	19.208	0.454
30	ICS	Slc38a10	baseline	-1.145	3.251	401	0.097	19.624	0.445
31	ICS	Tnfaip1	baseline	-1.862	3.221	402	0.004	18.525	0.214
32	ICS	Ttll4	baseline	-0.684	3.185	401	0.315	19.451	0.646
33	ICS	Setmar	Elk4	0.472	0.984	12	0.391	15.895	0.741

34	ICS	Slc38a10	Elk4	-1.789	6.331	12	0.208	23.971	0.348
35	ICS	Tnfaip1	Elk4	-2.506	5.157	13	0.053	24.523	0.165
36	ICS	Ttll4	Elk4	-1.328	4.108	12	0.244	23.254	0.440
37	ICS	Slc38a10	Setmar	-2.260	5.516	12	0.097	23.973	0.223
38	ICS	Tnfaip1	Setmar	-2.978	4.405	13	0.017	23.878	0.091
39	ICS	Ttll4	Setmar	-1.800	3.294	12	0.088	22.213	0.279
40	ICS	Tnfaip1	Slc38a10	-0.718	9.340	13	0.658	24.414	0.729
41	ICS	Ttll4	Slc38a10	0.461	8.640	12	0.774	23.178	0.823
42	ICS	Ttll4	Tnfaip1	1.178	7.289	13	0.414	24.973	0.542
43	MRC_Harwell	baseline	Arhgef4	-0.378	3.626	313	0.693	28.305	0.816
44	MRC_Harwell	Elk4	Arhgef4	-1.685	4.265	12	0.193	23.911	0.354
45	MRC_Harwell	Setmar	Arhgef4	-0.375	1.142	15	0.548	17.228	0.797
46	MRC_Harwell	Slc38a10	Arhgef4	-2.293	8.608	21	0.170	32.878	0.276
47	MRC_Harwell	Tnfaip1	Arhgef4	0.301	0.709	11	0.564	15.532	0.832
48	MRC_Harwell	Ttll4	Arhgef4	0.193	0.988	11	0.753	16.793	0.894
49	MRC_Harwell	Elk4	baseline	-1.307	3.704	319	0.035	18.024	0.375
50	MRC_Harwell	Setmar	baseline	0.003	3.564	322	0.996	16.392	0.998
51	MRC_Harwell	Slc38a10	baseline	-1.915	3.998	328	0.000	15.378	0.186
52	MRC_Harwell	Tnfaip1	baseline	0.679	3.579	318	0.289	18.490	0.644
53	MRC_Harwell	Ttll4	baseline	0.571	3.589	318	0.374	18.510	0.698
54	MRC_Harwell	Setmar	Elk4	1.310	3.041	21	0.089	19.732	0.390
55	MRC_Harwell	Slc38a10	Elk4	-0.608	8.426	27	0.596	29.626	0.727
56	MRC_Harwell	Tnfaip1	Elk4	1.986	3.208	17	0.027	21.164	0.210
57	MRC_Harwell	Ttll4	Elk4	1.878	3.388	17	0.040	21.596	0.239
58	MRC_Harwell	Slc38a10	Setmar	-1.918	6.449	30	0.044	24.438	0.239
59	MRC_Harwell	Tnfaip1	Setmar	0.677	1.024	20	0.139	14.783	0.629
60	MRC_Harwell	Ttll4	Setmar	0.568	1.177	20	0.242	15.201	0.687
61	MRC_Harwell	Tnfaip1	Slc38a10	2.594	7.082	26	0.023	28.056	0.135
62	MRC_Harwell	Ttll4	Slc38a10	2.485	7.200	26	0.030	28.268	0.153
63	MRC_Harwell	Ttll4	Tnfaip1	-0.109	0.889	16	0.810	14.823	0.938

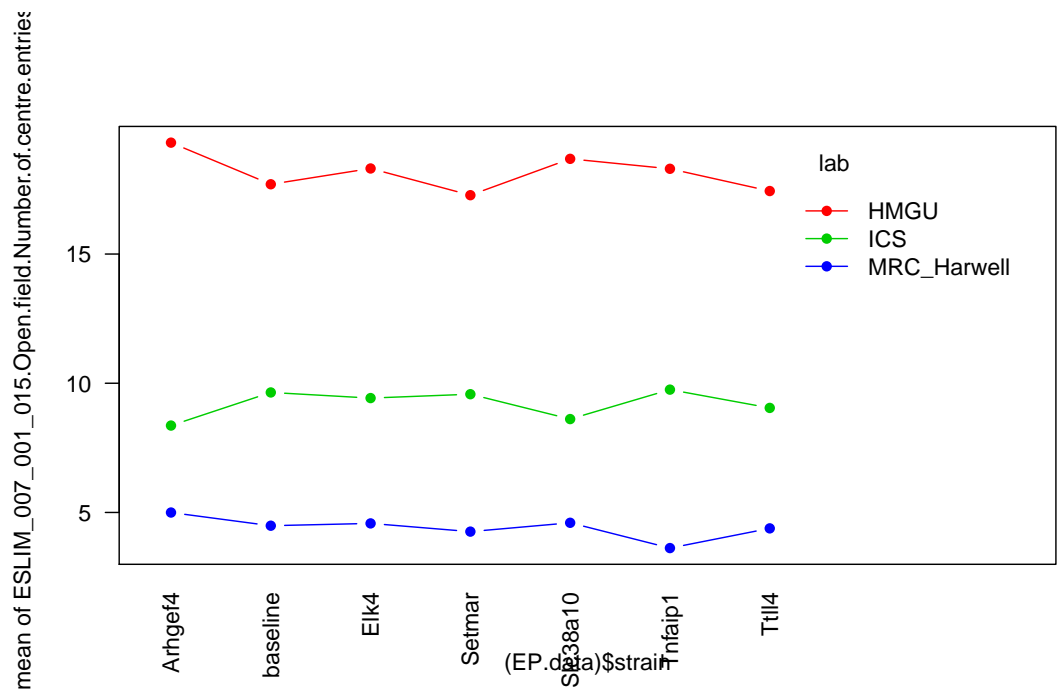
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count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	19.310555	1.7958235	10
2	Arhgef4	ICS	8.362422	1.3837921	7
3	Arhgef4	MRC_Harwell	4.997050	1.7433668	4
4	baseline	HMGU	17.700094	2.3489512	304
5	baseline	ICS	9.643513	1.4487444	396
6	baseline	MRC_Harwell	4.486853	1.2061598	311
7	Elk4	HMGU	18.310578	1.5842575	7
8	Elk4	ICS	9.425844	0.8240360	7
9	Elk4	MRC_Harwell	4.575921	1.0857402	10
10	Setmar	HMGU	17.277245	2.4992529	7
11	Setmar	ICS	9.575686	1.0119043	7
12	Setmar	MRC_Harwell	4.258349	0.7780358	13
13	Slc38a10	HMGU	18.683613	1.6051109	7
14	Slc38a10	ICS	8.613412	1.9435343	7
15	Slc38a10	MRC_Harwell	4.599968	1.2010542	19
16	Tnfaip1	HMGU	18.298584	2.6499263	7
17	Tnfaip1	ICS	9.752991	0.7590768	8
18	Tnfaip1	MRC_Harwell	3.621165	0.7893398	9
19	Ttll4	HMGU	17.437932	0.9369063	3
20	Ttll4	ICS	9.045636	0.9341036	7
21	Ttll4	MRC_Harwell	4.383812	1.2767017	9

S2.GxL= 0.15015 S2.GxL/S2.error= 0.05314178

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	423.431	70.572	24.961	0.000	0.238	0.955
lab	2	31850.888	15925.444	5632.861	0.000		
strain:lab	12	58.785	4.899	1.733	0.055		
Residuals	1138	3217.398	2.827				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.337	0.364	0.493	0.508
2	Elk4	Arhgef4	-0.179	0.721	0.601	0.770
3	Setmar	Arhgef4	-0.569	0.245	0.592	0.356
4	Slc38a10	Arhgef4	-0.285	0.544	0.582	0.634
5	Tnfaip1	Arhgef4	-0.421	0.402	0.600	0.496
6	Ttll4	Arhgef4	-0.584	0.273	0.633	0.375
7	Elk4	baseline	0.157	0.651	0.471	0.744
8	Setmar	baseline	-0.232	0.479	0.460	0.623
9	Slc38a10	baseline	0.052	0.861	0.445	0.909
10	Tnfaip1	baseline	-0.084	0.808	0.470	0.861
11	Ttll4	baseline	-0.247	0.526	0.510	0.637

12	Setmar	Elk4	-0.390	0.409	0.572	0.508
13	Slc38a10	Elk4	-0.105	0.815	0.560	0.854
14	Tnfaip1	Elk4	-0.242	0.619	0.581	0.685
15	Ttll4	Elk4	-0.404	0.434	0.612	0.522
16	Slc38a10	Setmar	0.284	0.515	0.549	0.614
17	Tnfaip1	Setmar	0.148	0.754	0.571	0.800
18	Ttll4	Setmar	-0.015	0.977	0.603	0.981
19	Tnfaip1	Slc38a10	-0.136	0.763	0.559	0.812
20	Ttll4	Slc38a10	-0.299	0.537	0.592	0.622
21	Ttll4	Tnfaip1	-0.163	0.753	0.612	0.795

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-1.610	5.451	312	0.033	87.377	0.087
2	HMGU	Elk4	Arhgef4	-1.000	2.939	15	0.255	24.792	0.330
3	HMGU	Setmar	Arhgef4	-2.033	4.433	15	0.069	22.360	0.097
4	HMGU	Slc38a10	Arhgef4	-0.627	2.966	15	0.471	24.740	0.541
5	HMGU	Tnfaip1	Arhgef4	-1.012	4.744	15	0.361	21.973	0.410
6	HMGU	Ttll4	Arhgef4	-1.873	2.798	11	0.117	16.212	0.147
7	HMGU	Elk4	baseline	0.610	5.459	309	0.495	125.946	0.561
8	HMGU	Setmar	baseline	-0.423	5.532	309	0.638	127.655	0.689
9	HMGU	Slc38a10	baseline	0.984	5.460	309	0.272	125.976	0.350
10	HMGU	Tnfaip1	baseline	0.598	5.547	309	0.507	128.009	0.571
11	HMGU	Ttll4	baseline	-0.262	5.487	305	0.847	246.582	0.858
12	HMGU	Setmar	Elk4	-1.033	4.378	12	0.374	17.448	0.418
13	HMGU	Slc38a10	Elk4	0.373	2.543	12	0.669	20.472	0.717
14	HMGU	Tnfaip1	Elk4	-0.012	4.766	12	0.992	17.047	0.993
15	HMGU	Ttll4	Elk4	-0.873	2.102	8	0.408	12.755	0.458
16	HMGU	Slc38a10	Setmar	1.406	4.411	12	0.234	17.411	0.276
17	HMGU	Tnfaip1	Setmar	1.021	6.634	12	0.472	15.709	0.501
18	HMGU	Ttll4	Setmar	0.161	4.904	8	0.919	10.079	0.923
19	HMGU	Tnfaip1	Slc38a10	-0.385	4.799	12	0.748	17.015	0.769
20	HMGU	Ttll4	Slc38a10	-1.246	2.152	8	0.253	12.652	0.299
21	HMGU	Ttll4	Tnfaip1	-0.861	5.486	8	0.609	9.858	0.625
22	ICS	baseline	Arhgef4	1.281	2.096	401	0.021	47.257	0.106
23	ICS	Elk4	Arhgef4	1.063	1.297	12	0.106	23.740	0.207
24	ICS	Setmar	Arhgef4	1.213	1.469	12	0.086	23.356	0.166
25	ICS	Slc38a10	Arhgef4	0.251	2.846	12	0.785	19.799	0.814
26	ICS	Tnfaip1	Arhgef4	1.391	1.194	13	0.029	24.998	0.090
27	ICS	Ttll4	Arhgef4	0.683	1.394	12	0.300	23.538	0.422
28	ICS	Elk4	baseline	-0.218	2.078	401	0.692	46.862	0.780
29	ICS	Setmar	baseline	-0.068	2.083	401	0.902	46.972	0.931
30	ICS	Slc38a10	baseline	-1.030	2.124	401	0.065	47.853	0.193
31	ICS	Tnfaip1	baseline	0.109	2.072	402	0.831	41.457	0.885
32	ICS	Ttll4	baseline	-0.598	2.081	401	0.278	46.924	0.445
33	ICS	Setmar	Elk4	0.150	0.851	12	0.766	23.739	0.841

34	ICS	Slc38a10	Elk4	-0.812	2.228	12	0.329	21.260	0.411
35	ICS	Tnfaip1	Elk4	0.327	0.624	13	0.438	22.607	0.637
36	ICS	Ttll4	Elk4	-0.380	0.776	12	0.435	23.467	0.604
37	ICS	Slc38a10	Setmar	-0.962	2.401	12	0.268	20.817	0.344
38	ICS	Tnfaip1	Setmar	0.177	0.783	13	0.705	23.868	0.806
39	ICS	Ttll4	Setmar	-0.530	0.948	12	0.329	23.937	0.490
40	ICS	Tnfaip1	Slc38a10	1.140	2.054	13	0.148	23.486	0.229
41	ICS	Ttll4	Slc38a10	0.432	2.325	12	0.606	21.009	0.664
42	ICS	Ttll4	Tnfaip1	-0.707	0.713	13	0.130	23.386	0.323
43	MRC_Harwell	baseline	Arhgef4	-0.510	1.470	313	0.404	56.839	0.536
44	MRC_Harwell	Elk4	Arhgef4	-0.421	1.644	12	0.589	21.844	0.657
45	MRC_Harwell	Setmar	Arhgef4	-0.739	1.092	15	0.235	26.983	0.370
46	MRC_Harwell	Slc38a10	Arhgef4	-0.397	1.671	21	0.582	32.988	0.661
47	MRC_Harwell	Tnfaip1	Arhgef4	-1.376	1.282	11	0.068	21.577	0.130
48	MRC_Harwell	Ttll4	Arhgef4	-0.613	2.014	11	0.487	18.990	0.552
49	MRC_Harwell	Elk4	baseline	0.089	1.447	319	0.818	26.657	0.895
50	MRC_Harwell	Setmar	baseline	-0.229	1.423	322	0.499	22.724	0.726
51	MRC_Harwell	Slc38a10	baseline	0.113	1.454	328	0.692	19.316	0.857
52	MRC_Harwell	Tnfaip1	baseline	-0.866	1.434	318	0.033	28.359	0.214
53	MRC_Harwell	Ttll4	baseline	-0.103	1.459	318	0.801	28.703	0.881
54	MRC_Harwell	Setmar	Elk4	-0.318	0.851	21	0.422	23.654	0.641
55	MRC_Harwell	Slc38a10	Elk4	0.024	1.355	27	0.958	28.259	0.973
56	MRC_Harwell	Tnfaip1	Elk4	-0.955	0.917	17	0.045	25.099	0.186
57	MRC_Harwell	Ttll4	Elk4	-0.192	1.391	17	0.727	28.027	0.805
58	MRC_Harwell	Slc38a10	Setmar	0.342	1.108	30	0.374	24.016	0.613
59	MRC_Harwell	Tnfaip1	Setmar	-0.637	0.612	20	0.075	21.106	0.334
60	MRC_Harwell	Ttll4	Setmar	0.125	1.015	20	0.777	25.840	0.859
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.979	1.190	26	0.036	27.321	0.175
62	MRC_Harwell	Ttll4	Slc38a10	-0.216	1.500	26	0.666	30.303	0.772
63	MRC_Harwell	Ttll4	Tnfaip1	0.763	1.127	16	0.147	26.523	0.313

## 20 ESLIM\_\_007\_\_001\_\_701.Open.field.Distance.travelled...total

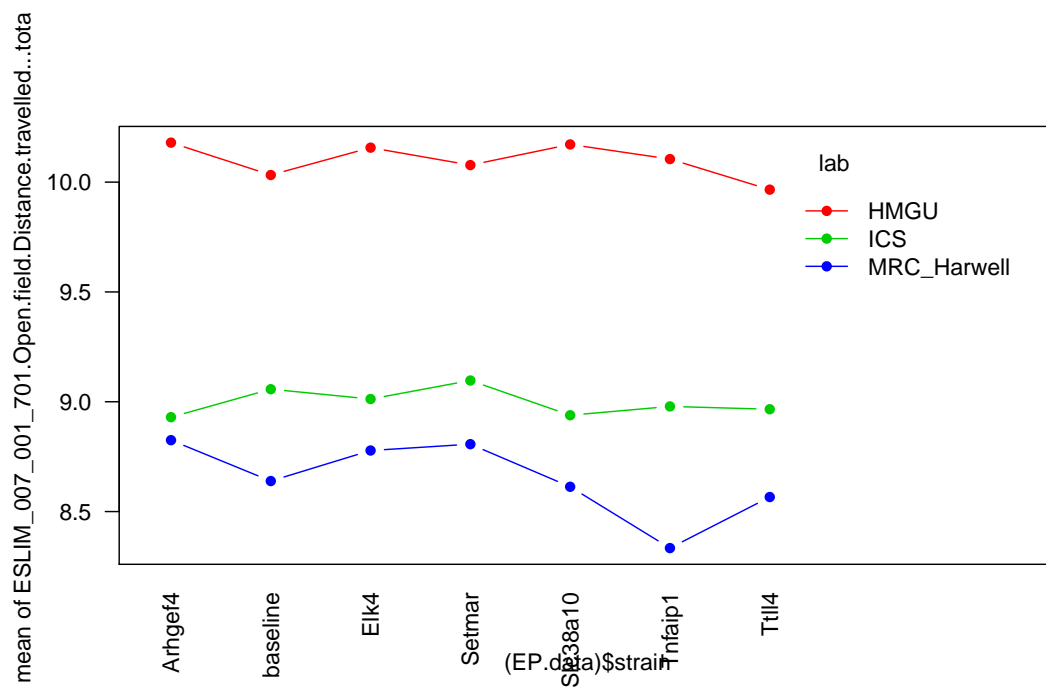
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	10.179798	0.11193210	10
2	Arhgef4	ICS	8.929849	0.11888789	7
3	Arhgef4	MRC_Harwell	8.825151	0.22427203	4
4	baseline	HMGU	10.032464	0.19983270	304
5	baseline	ICS	9.057184	0.12395774	396
6	baseline	MRC_Harwell	8.639031	0.16251358	311
7	Elk4	HMGU	10.157006	0.14756724	7
8	Elk4	ICS	9.012471	0.11733514	7
9	Elk4	MRC_Harwell	8.777989	0.15175843	10
10	Setmar	HMGU	10.077584	0.12014437	7
11	Setmar	ICS	9.096760	0.10489313	7
12	Setmar	MRC_Harwell	8.806877	0.10332848	13
13	Slc38a10	HMGU	10.171687	0.13462039	7
14	Slc38a10	ICS	8.938618	0.11558635	7
15	Slc38a10	MRC_Harwell	8.612877	0.13708366	19
16	Tnfaip1	HMGU	10.105037	0.10006622	7
17	Tnfaip1	ICS	8.978793	0.10138262	8
18	Tnfaip1	MRC_Harwell	8.333757	0.28874719	9
19	Ttll4	HMGU	9.965792	0.03599551	3
20	Ttll4	ICS	8.965963	0.08150011	7
21	Ttll4	MRC_Harwell	8.566201	0.17535676	9

S2.GxL= 0.00825 S2.GxL/S2.error= 0.32324965

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	5.223	0.870	34.133	0.000	1.441	0.277
lab	2	368.621	184.310	7227.417	0.000		
strain:lab	12	1.424	0.119	4.655	0.000		
Residuals	1138	29.021	0.026				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.062	0.078	0.083	0.467
2	Elk4	Arhgef4	0.013	0.790	0.089	0.889
3	Setmar	Arhgef4	0.026	0.575	0.089	0.774
4	Slc38a10	Arhgef4	-0.066	0.138	0.088	0.467
5	Tnfaip1	Arhgef4	-0.170	0.000	0.089	0.081
6	Ttll4	Arhgef4	-0.134	0.008	0.092	0.168
7	Elk4	baseline	0.075	0.023	0.081	0.375
8	Setmar	baseline	0.088	0.005	0.081	0.296
9	Slc38a10	baseline	-0.004	0.887	0.080	0.961
10	Tnfaip1	baseline	-0.107	0.001	0.081	0.210
11	Ttll4	baseline	-0.072	0.051	0.084	0.407

12	Setmar	Elk4	0.013	0.766	0.087	0.881
13	Slc38a10	Elk4	-0.079	0.066	0.087	0.380
14	Tnfaip1	Elk4	-0.182	0.000	0.087	0.059
15	Ttll4	Elk4	-0.147	0.003	0.090	0.129
16	Slc38a10	Setmar	-0.092	0.026	0.086	0.305
17	Tnfaip1	Setmar	-0.196	0.000	0.087	0.044
18	Ttll4	Setmar	-0.160	0.001	0.090	0.099
19	Tnfaip1	Slc38a10	-0.103	0.016	0.087	0.255
20	Ttll4	Slc38a10	-0.068	0.139	0.089	0.460
21	Ttll4	Tnfaip1	0.035	0.471	0.090	0.701

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.147	0.039	312	0.021	18.563	0.317
2	HMGU	Elk4	Arhgef4	-0.023	0.016	15	0.722	17.616	0.875
3	HMGU	Setmar	Arhgef4	-0.102	0.013	15	0.092	16.647	0.477
4	HMGU	Slc38a10	Arhgef4	-0.008	0.015	15	0.894	17.138	0.955
5	HMGU	Tnfaip1	Arhgef4	-0.075	0.012	15	0.178	16.049	0.598
6	HMGU	Ttll4	Arhgef4	-0.214	0.010	11	0.009	18.031	0.157
7	HMGU	Elk4	baseline	0.125	0.040	309	0.103	21.791	0.413
8	HMGU	Setmar	baseline	0.045	0.039	309	0.553	21.751	0.765
9	HMGU	Slc38a10	baseline	0.139	0.040	309	0.068	21.772	0.361
10	HMGU	Tnfaip1	baseline	0.073	0.039	309	0.339	21.727	0.631
11	HMGU	Ttll4	baseline	-0.067	0.040	305	0.564	38.324	0.702
12	HMGU	Setmar	Elk4	-0.079	0.018	12	0.291	18.854	0.596
13	HMGU	Slc38a10	Elk4	0.015	0.020	12	0.849	19.410	0.923
14	HMGU	Tnfaip1	Elk4	-0.052	0.016	12	0.456	18.144	0.724
15	HMGU	Ttll4	Elk4	-0.191	0.017	8	0.064	19.539	0.236
16	HMGU	Slc38a10	Setmar	0.094	0.016	12	0.193	18.270	0.526
17	HMGU	Tnfaip1	Setmar	0.027	0.012	12	0.651	16.865	0.848
18	HMGU	Ttll4	Setmar	-0.112	0.011	8	0.164	18.149	0.459
19	HMGU	Tnfaip1	Slc38a10	-0.067	0.014	12	0.314	17.522	0.647
20	HMGU	Ttll4	Slc38a10	-0.206	0.014	8	0.035	18.984	0.192
21	HMGU	Ttll4	Tnfaip1	-0.139	0.008	8	0.052	16.757	0.341
22	ICS	baseline	Arhgef4	0.127	0.015	401	0.007	15.459	0.366
23	ICS	Elk4	Arhgef4	0.083	0.014	12	0.215	17.481	0.571
24	ICS	Setmar	Arhgef4	0.167	0.013	12	0.016	16.990	0.255
25	ICS	Slc38a10	Arhgef4	0.009	0.014	12	0.891	17.410	0.952
26	ICS	Tnfaip1	Arhgef4	0.049	0.012	13	0.405	16.574	0.732
27	ICS	Ttll4	Arhgef4	0.036	0.010	12	0.520	16.184	0.799
28	ICS	Elk4	baseline	-0.045	0.015	401	0.344	15.457	0.748
29	ICS	Setmar	baseline	0.040	0.015	401	0.402	15.447	0.776
30	ICS	Slc38a10	baseline	-0.119	0.015	401	0.012	15.456	0.399
31	ICS	Tnfaip1	baseline	-0.078	0.015	402	0.076	14.997	0.572
32	ICS	Ttll4	baseline	-0.091	0.015	401	0.053	15.432	0.515
33	ICS	Setmar	Elk4	0.084	0.012	12	0.182	16.923	0.559

34	ICS	Slc38a10	Elk4	-0.074	0.014	12	0.258	17.345	0.611
35	ICS	Tnfaip1	Elk4	-0.034	0.012	13	0.561	16.514	0.813
36	ICS	Ttll4	Elk4	-0.047	0.010	12	0.406	16.115	0.743
37	ICS	Slc38a10	Setmar	-0.158	0.012	12	0.020	16.849	0.279
38	ICS	Tnfaip1	Setmar	-0.118	0.011	13	0.045	16.054	0.409
39	ICS	Ttll4	Setmar	-0.131	0.009	12	0.023	15.585	0.357
40	ICS	Tnfaip1	Slc38a10	0.040	0.012	13	0.486	16.447	0.778
41	ICS	Ttll4	Slc38a10	0.027	0.010	12	0.618	16.038	0.847
42	ICS	Ttll4	Tnfaip1	-0.013	0.009	13	0.793	15.311	0.927
43	MRC_Harwell	baseline	Arhgef4	-0.186	0.027	313	0.024	23.674	0.234
44	MRC_Harwell	Elk4	Arhgef4	-0.047	0.030	12	0.653	22.850	0.776
45	MRC_Harwell	Setmar	Arhgef4	-0.018	0.019	15	0.818	20.276	0.904
46	MRC_Harwell	Slc38a10	Arhgef4	-0.212	0.023	21	0.020	22.140	0.180
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.491	0.074	11	0.012	21.297	0.028
48	MRC_Harwell	Ttll4	Arhgef4	-0.259	0.036	11	0.044	22.875	0.145
49	MRC_Harwell	Elk4	baseline	0.139	0.026	319	0.008	16.262	0.331
50	MRC_Harwell	Setmar	baseline	0.168	0.026	322	0.000	15.192	0.237
51	MRC_Harwell	Slc38a10	baseline	-0.026	0.026	328	0.493	14.202	0.848
52	MRC_Harwell	Tnfaip1	baseline	-0.305	0.028	318	0.000	17.056	0.044
53	MRC_Harwell	Ttll4	baseline	-0.073	0.027	318	0.187	16.797	0.609
54	MRC_Harwell	Setmar	Elk4	0.029	0.016	21	0.593	16.193	0.838
55	MRC_Harwell	Slc38a10	Elk4	-0.165	0.020	27	0.006	16.649	0.255
56	MRC_Harwell	Tnfaip1	Elk4	-0.444	0.051	17	0.001	25.271	0.013
57	MRC_Harwell	Ttll4	Elk4	-0.212	0.027	17	0.012	19.950	0.170
58	MRC_Harwell	Slc38a10	Setmar	-0.194	0.016	30	0.000	15.021	0.174
59	MRC_Harwell	Tnfaip1	Setmar	-0.473	0.040	20	0.000	22.564	0.006
60	MRC_Harwell	Ttll4	Setmar	-0.241	0.019	20	0.001	17.196	0.107
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.279	0.039	26	0.002	21.519	0.078
62	MRC_Harwell	Ttll4	Slc38a10	-0.047	0.022	26	0.449	17.549	0.746
63	MRC_Harwell	Ttll4	Tnfaip1	0.232	0.057	16	0.056	26.014	0.185

## 21 ESLIM\_\_007\_\_001\_\_702.Open.field.Number.of.rears...total count after filtering

strain	lab	n
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### Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Arhgef4	HMGU	10
3	Arhgef4	ICS	7
4	baseline	HMGU	304
5	baseline	ICS	396
6	Elk4	HMGU	7
7	Elk4	ICS	7
8	Entpd1	ICS	9
9	Setmar	HMGU	7
10	Setmar	ICS	7
11	Slc38a10	HMGU	7
12	Slc38a10	ICS	7
13	Sytl1	ICS	8
14	Tnfaip1	HMGU	7
15	Tnfaip1	ICS	8
16	Ttll4	HMGU	3
17	Ttll4	ICS	7

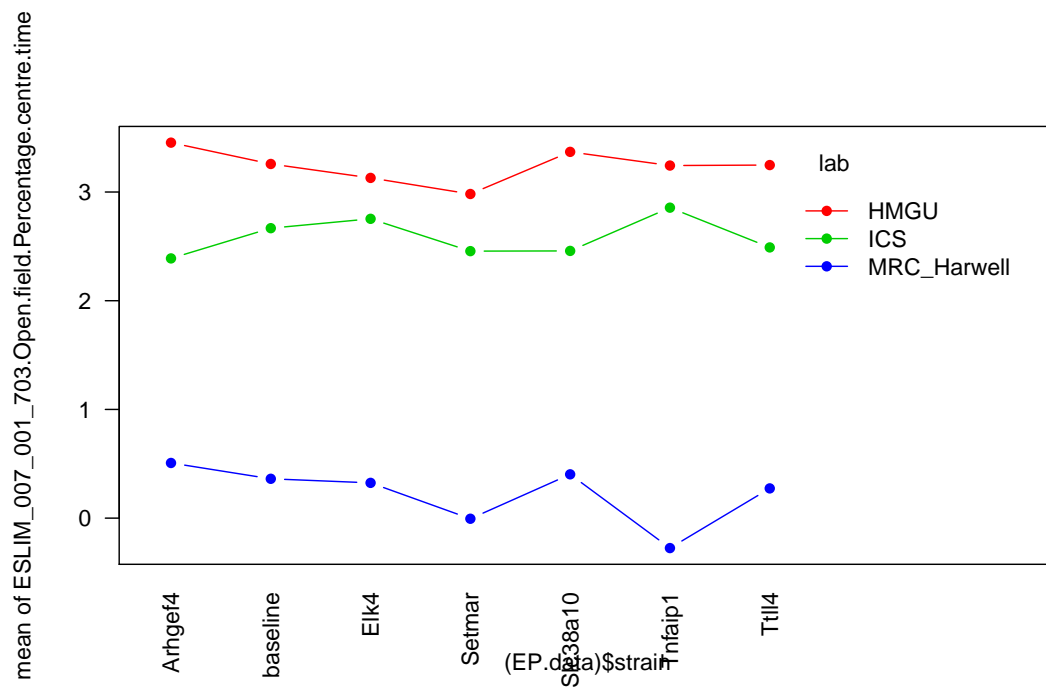
## 22 ESLIM\_\_007\_\_001\_\_703.Open.field.Percentage.centre.time

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	396
6	baseline	MRC_Harwell	311
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	9
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	9
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.454125054	0.3464847	10
2	Arhgef4	ICS	2.389188929	0.4528744	7
3	Arhgef4	MRC_Harwell	0.507424672	0.5679589	4
4	baseline	HMGU	3.257983609	0.4059188	304
5	baseline	ICS	2.667240507	0.3599861	396
6	baseline	MRC_Harwell	0.361801469	0.7825296	311
7	Elk4	HMGU	3.129690756	0.2267621	7
8	Elk4	ICS	2.753343708	0.1337648	7
9	Elk4	MRC_Harwell	0.324372013	0.7130810	10
10	Setmar	HMGU	2.981636158	0.4678213	7
11	Setmar	ICS	2.456075780	0.2225702	7
12	Setmar	MRC_Harwell	-0.005611539	0.5574793	13
13	Slc38a10	HMGU	3.369223945	0.4687743	7
14	Slc38a10	ICS	2.458166079	0.5302526	7
15	Slc38a10	MRC_Harwell	0.402893982	0.6994693	19
16	Tnfaip1	HMGU	3.243449370	0.5227122	7
17	Tnfaip1	ICS	2.855982917	0.2855553	8
18	Tnfaip1	MRC_Harwell	-0.275531836	0.5629667	9
19	Ttll4	HMGU	3.247838817	0.1150596	3
20	Ttll4	ICS	2.490324443	0.2598255	7
21	Ttll4	MRC_Harwell	0.273520388	0.5449741	9

S2.GxL= 0.00435 S2.GxL/S2.error= 0.01525649

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	40.448	6.741	23.684	0.000	1.380	0.298
lab	2	1730.540	865.270	3039.890	0.000		
strain:lab	12	4.856	0.405	1.422	0.149		
Residuals	1138	323.919	0.285				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.018	0.877	0.131	0.892
2	Elk4	Arhgef4	-0.043	0.790	0.170	0.806
3	Setmar	Arhgef4	-0.313	0.044	0.166	0.084
4	Slc38a10	Arhgef4	-0.009	0.950	0.162	0.955
5	Tnfaip1	Arhgef4	-0.193	0.226	0.169	0.276
6	Ttll4	Arhgef4	-0.117	0.488	0.180	0.527
7	Elk4	baseline	-0.024	0.825	0.123	0.846
8	Setmar	baseline	-0.295	0.005	0.118	0.028
9	Slc38a10	baseline	0.009	0.925	0.111	0.938
10	Tnfaip1	baseline	-0.175	0.112	0.123	0.180
11	Ttll4	baseline	-0.099	0.423	0.136	0.481



12	Setmar	Elk4	-0.271	0.071	0.160	0.116
13	Slc38a10	Elk4	0.033	0.816	0.155	0.833
14	Tnfaip1	Elk4	-0.151	0.328	0.164	0.375
15	Ttll4	Elk4	-0.075	0.649	0.174	0.675
16	Slc38a10	Setmar	0.304	0.028	0.150	0.066
17	Tnfaip1	Setmar	0.120	0.423	0.160	0.468
18	Ttll4	Setmar	0.196	0.220	0.170	0.271
19	Tnfaip1	Slc38a10	-0.184	0.199	0.155	0.257
20	Ttll4	Slc38a10	-0.108	0.483	0.165	0.525
21	Ttll4	Tnfaip1	0.076	0.642	0.174	0.668

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.196	0.163	312	0.132	90.593	0.223
2	HMGU	Elk4	Arhgef4	-0.324	0.093	15	0.047	24.308	0.078
3	HMGU	Setmar	Arhgef4	-0.472	0.160	15	0.030	21.161	0.042
4	HMGU	Slc38a10	Arhgef4	-0.085	0.160	15	0.673	21.149	0.701
5	HMGU	Tnfaip1	Arhgef4	-0.211	0.181	15	0.331	20.515	0.370
6	HMGU	Ttll4	Arhgef4	-0.206	0.101	11	0.344	15.272	0.381
7	HMGU	Elk4	baseline	-0.128	0.163	309	0.406	129.443	0.478
8	HMGU	Setmar	baseline	-0.276	0.166	309	0.077	132.063	0.130
9	HMGU	Slc38a10	baseline	0.111	0.166	309	0.475	132.077	0.541
10	HMGU	Tnfaip1	baseline	-0.015	0.167	309	0.926	132.910	0.936
11	HMGU	Ttll4	baseline	-0.010	0.164	305	0.966	250.303	0.968
12	HMGU	Setmar	Elk4	-0.148	0.135	12	0.466	17.149	0.505
13	HMGU	Slc38a10	Elk4	0.240	0.136	12	0.247	17.134	0.287
14	HMGU	Tnfaip1	Elk4	0.114	0.162	12	0.607	16.352	0.634
15	HMGU	Ttll4	Elk4	0.118	0.042	8	0.427	14.648	0.496
16	HMGU	Slc38a10	Setmar	0.388	0.219	12	0.147	15.271	0.167
17	HMGU	Tnfaip1	Setmar	0.262	0.246	12	0.343	14.927	0.366
18	HMGU	Ttll4	Setmar	0.266	0.167	8	0.373	9.765	0.392
19	HMGU	Tnfaip1	Slc38a10	-0.126	0.246	12	0.644	14.922	0.661
20	HMGU	Ttll4	Slc38a10	-0.121	0.168	8	0.679	9.757	0.692
21	HMGU	Ttll4	Tnfaip1	0.004	0.208	8	0.989	9.418	0.990
22	ICS	baseline	Arhgef4	0.278	0.131	401	0.044	106.408	0.098
23	ICS	Elk4	Arhgef4	0.364	0.111	12	0.064	18.103	0.087
24	ICS	Setmar	Arhgef4	0.067	0.127	12	0.732	17.432	0.756
25	ICS	Slc38a10	Arhgef4	0.069	0.243	12	0.798	14.961	0.808
26	ICS	Tnfaip1	Arhgef4	0.467	0.139	13	0.031	18.699	0.042
27	ICS	Ttll4	Arhgef4	0.101	0.136	12	0.618	17.110	0.649
28	ICS	Elk4	baseline	0.086	0.128	401	0.528	103.853	0.603
29	ICS	Setmar	baseline	-0.211	0.128	401	0.123	104.284	0.205
30	ICS	Slc38a10	baseline	-0.209	0.132	401	0.132	107.448	0.213
31	ICS	Tnfaip1	baseline	0.189	0.129	402	0.142	90.361	0.237
32	ICS	Ttll4	baseline	-0.177	0.129	401	0.197	104.530	0.288
33	ICS	Setmar	Elk4	-0.297	0.034	12	0.010	23.939	0.038

34	ICS	Slc38a10	Elk4	-0.295	0.150	12	0.179	16.695	0.211
35	ICS	Tnfaip1	Elk4	0.103	0.052	13	0.401	24.107	0.502
36	ICS	Ttll4	Elk4	-0.263	0.043	12	0.035	23.347	0.082
37	ICS	Slc38a10	Setmar	0.002	0.165	12	0.992	16.277	0.993
38	ICS	Tnfaip1	Setmar	0.400	0.067	13	0.010	22.866	0.022
39	ICS	Ttll4	Setmar	0.034	0.059	12	0.796	21.830	0.832
40	ICS	Tnfaip1	Slc38a10	0.398	0.174	13	0.088	17.651	0.108
41	ICS	Ttll4	Slc38a10	0.032	0.174	12	0.888	16.070	0.896
42	ICS	Ttll4	Tnfaip1	-0.366	0.075	13	0.023	22.188	0.042
43	MRC_Harwell	baseline	Arhgef4	-0.146	0.610	313	0.711	322.541	0.719
44	MRC_Harwell	Elk4	Arhgef4	-0.183	0.462	12	0.657	13.288	0.665
45	MRC_Harwell	Setmar	Arhgef4	-0.513	0.313	15	0.130	17.501	0.142
46	MRC_Harwell	Slc38a10	Arhgef4	-0.105	0.465	21	0.783	23.519	0.789
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.783	0.318	11	0.041	12.662	0.045
48	MRC_Harwell	Ttll4	Arhgef4	-0.234	0.304	11	0.495	12.740	0.509
49	MRC_Harwell	Elk4	baseline	-0.037	0.609	319	0.881	273.932	0.889
50	MRC_Harwell	Setmar	baseline	-0.367	0.601	322	0.095	239.246	0.125
51	MRC_Harwell	Slc38a10	baseline	0.041	0.606	328	0.823	184.490	0.842
52	MRC_Harwell	Tnfaip1	baseline	-0.637	0.605	318	0.016	283.894	0.023
53	MRC_Harwell	Ttll4	baseline	-0.088	0.604	318	0.737	283.807	0.752
54	MRC_Harwell	Setmar	Elk4	-0.330	0.396	21	0.226	25.850	0.250
55	MRC_Harwell	Slc38a10	Elk4	0.079	0.496	27	0.777	32.600	0.789
56	MRC_Harwell	Tnfaip1	Elk4	-0.600	0.418	17	0.060	20.238	0.068
57	MRC_Harwell	Ttll4	Elk4	-0.051	0.409	17	0.865	20.309	0.871
58	MRC_Harwell	Slc38a10	Setmar	0.409	0.418	30	0.089	37.969	0.111
59	MRC_Harwell	Tnfaip1	Setmar	-0.270	0.313	20	0.279	25.423	0.309
60	MRC_Harwell	Ttll4	Setmar	0.279	0.305	20	0.258	25.547	0.288
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.678	0.436	26	0.017	31.703	0.023
62	MRC_Harwell	Ttll4	Slc38a10	-0.129	0.430	26	0.630	31.773	0.649
63	MRC_Harwell	Ttll4	Tnfaip1	0.549	0.307	16	0.052	19.912	0.062

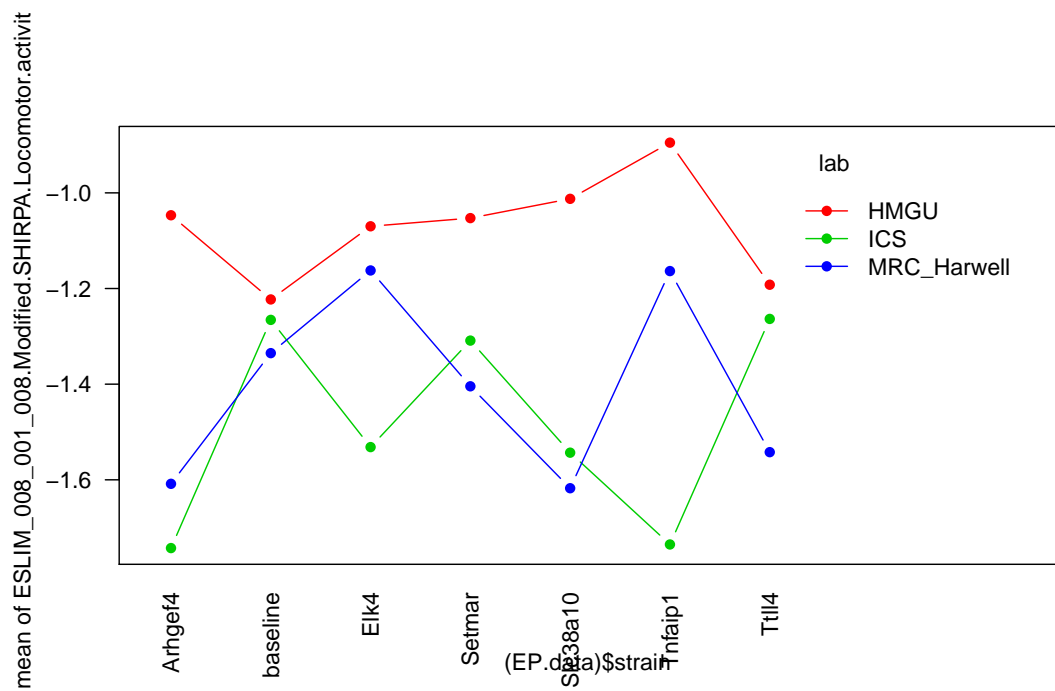
## 23 ESLIM\_008\_001\_008.Modified.SHIRPA.Locomotor.activity

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	9
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	403
6	baseline	MRC_Harwell	394
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	-1.0468498	0.1770868	9
2	Arhgef4	ICS	-1.7427659	0.5555901	7
3	Arhgef4	MRC_Harwell	-1.6084031	0.1417385	4
4	baseline	HMGU	-1.2228558	0.3158887	304
5	baseline	ICS	-1.2656197	0.3287406	403
6	baseline	MRC_Harwell	-1.3351348	0.4139522	394
7	Elk4	HMGU	-1.0699073	0.2823591	7
8	Elk4	ICS	-1.5316231	0.3011433	7
9	Elk4	MRC_Harwell	-1.1622720	0.2028906	10
10	Setmar	HMGU	-1.0528056	0.2653947	7
11	Setmar	ICS	-1.3089000	0.3328541	7
12	Setmar	MRC_Harwell	-1.4044719	0.3198288	13
13	Slc38a10	HMGU	-1.0124717	0.1285362	7
14	Slc38a10	ICS	-1.5432712	0.5646312	7
15	Slc38a10	MRC_Harwell	-1.6176041	0.4582633	19
16	Tnfaip1	HMGU	-0.8950126	0.1930039	7
17	Tnfaip1	ICS	-1.7351814	0.7221872	8
18	Tnfaip1	MRC_Harwell	-1.1635603	0.2521180	13
19	Ttll4	HMGU	-1.1920724	0.1181874	3
20	Ttll4	ICS	-1.2635795	0.1617088	7
21	Ttll4	MRC_Harwell	-1.5421865	0.4787918	10

S2.GxL= 0.02616 S2.GxL/S2.error= 0.20208869

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	1.780	0.297	2.290	0.033	0.472	0.816
lab	2	4.109	2.054	15.862	0.000		
strain:lab	12	6.943	0.579	4.467	0.000		
Residuals	1232	159.571	0.130				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.178	0.028	0.156	0.277
2	Elk4	Arhgef4	0.206	0.060	0.173	0.257
3	Setmar	Arhgef4	0.192	0.071	0.172	0.286
4	Slc38a10	Arhgef4	0.045	0.657	0.170	0.795
5	Tnfaip1	Arhgef4	0.195	0.065	0.171	0.277
6	Ttll4	Arhgef4	0.121	0.287	0.178	0.510
7	Elk4	baseline	0.027	0.714	0.152	0.861
8	Setmar	baseline	0.013	0.849	0.151	0.931
9	Slc38a10	baseline	-0.133	0.037	0.149	0.389
10	Tnfaip1	baseline	0.017	0.809	0.150	0.913
11	Ttll4	baseline	-0.057	0.483	0.158	0.724

12	Setmar	Elk4	-0.014	0.891	0.167	0.936
13	Slc38a10	Elk4	-0.160	0.097	0.166	0.353
14	Tnfaip1	Elk4	-0.011	0.916	0.167	0.950
15	Ttll4	Elk4	-0.084	0.440	0.174	0.637
16	Slc38a10	Setmar	-0.146	0.117	0.165	0.392
17	Tnfaip1	Setmar	0.003	0.973	0.165	0.985
18	Ttll4	Setmar	-0.070	0.507	0.173	0.691
19	Tnfaip1	Slc38a10	0.150	0.106	0.164	0.380
20	Ttll4	Slc38a10	0.076	0.456	0.171	0.666
21	Ttll4	Tnfaip1	-0.074	0.485	0.172	0.676

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.176	0.098	311	0.098	17.663	0.494
2	HMGU	Elk4	Arhgef4	-0.023	0.052	14	0.844	17.856	0.929
3	HMGU	Setmar	Arhgef4	-0.006	0.048	14	0.958	17.443	0.982
4	HMGU	Slc38a10	Arhgef4	0.034	0.025	14	0.673	14.901	0.889
5	HMGU	Tnfaip1	Arhgef4	0.152	0.034	14	0.124	15.903	0.547
6	HMGU	Ttll4	Arhgef4	-0.145	0.028	10	0.221	17.199	0.575
7	HMGU	Elk4	baseline	0.153	0.099	309	0.205	19.529	0.561
8	HMGU	Setmar	baseline	0.170	0.099	309	0.159	19.514	0.518
9	HMGU	Slc38a10	baseline	0.210	0.098	309	0.080	19.426	0.425
10	HMGU	Tnfaip1	baseline	0.328	0.099	309	0.007	19.459	0.219
11	HMGU	Ttll4	baseline	0.031	0.099	305	0.866	31.700	0.917
12	HMGU	Setmar	Elk4	0.017	0.075	12	0.909	20.423	0.950
13	HMGU	Slc38a10	Elk4	0.057	0.048	12	0.633	17.899	0.826
14	HMGU	Tnfaip1	Elk4	0.175	0.058	12	0.201	18.955	0.514
15	HMGU	Ttll4	Elk4	-0.122	0.063	8	0.502	19.901	0.675
16	HMGU	Slc38a10	Setmar	0.040	0.043	12	0.724	17.393	0.876
17	HMGU	Tnfaip1	Setmar	0.158	0.054	12	0.227	18.494	0.552
18	HMGU	Ttll4	Setmar	-0.139	0.056	8	0.420	19.693	0.626
19	HMGU	Tnfaip1	Slc38a10	0.117	0.027	12	0.205	15.449	0.638
20	HMGU	Ttll4	Slc38a10	-0.180	0.016	8	0.073	15.242	0.474
21	HMGU	Ttll4	Tnfaip1	-0.297	0.031	8	0.041	17.677	0.267
22	ICS	baseline	Arhgef4	0.477	0.111	408	0.000	20.484	0.083
23	ICS	Elk4	Arhgef4	0.211	0.200	12	0.394	23.955	0.529
24	ICS	Setmar	Arhgef4	0.434	0.210	12	0.102	23.891	0.208
25	ICS	Slc38a10	Arhgef4	0.199	0.314	12	0.518	22.449	0.602
26	ICS	Tnfaip1	Arhgef4	0.008	0.423	13	0.982	22.562	0.985
27	ICS	Ttll4	Arhgef4	0.479	0.167	12	0.049	23.952	0.143
28	ICS	Elk4	baseline	-0.266	0.108	408	0.034	20.210	0.320
29	ICS	Setmar	baseline	-0.043	0.108	408	0.730	20.235	0.870
30	ICS	Slc38a10	baseline	-0.278	0.111	408	0.030	20.497	0.301
31	ICS	Tnfaip1	baseline	-0.470	0.115	409	0.000	19.631	0.085
32	ICS	Ttll4	baseline	0.002	0.107	408	0.987	20.129	0.994
33	ICS	Setmar	Elk4	0.223	0.101	12	0.214	22.135	0.442

34	ICS	Slc38a10	Elk4	-0.012	0.205	12	0.962	23.926	0.972
35	ICS	Tnfaip1	Elk4	-0.204	0.323	13	0.501	23.983	0.590
36	ICS	Ttll4	Elk4	0.268	0.058	12	0.060	18.948	0.320
37	ICS	Slc38a10	Setmar	-0.234	0.215	12	0.363	23.849	0.494
38	ICS	Tnfaip1	Setmar	-0.426	0.332	13	0.176	23.853	0.268
39	ICS	Ttll4	Setmar	0.045	0.068	12	0.751	19.872	0.867
40	ICS	Tnfaip1	Slc38a10	-0.192	0.428	13	0.581	22.498	0.643
41	ICS	Ttll4	Slc38a10	0.280	0.172	12	0.232	23.978	0.389
42	ICS	Ttll4	Tnfaip1	0.472	0.293	13	0.116	24.377	0.204
43	MRC_Harwell	baseline	Arhgef4	0.273	0.170	396	0.188	39.014	0.382
44	MRC_Harwell	Elk4	Arhgef4	0.446	0.036	12	0.002	17.448	0.097
45	MRC_Harwell	Setmar	Arhgef4	0.204	0.086	15	0.242	23.026	0.479
46	MRC_Harwell	Slc38a10	Arhgef4	-0.009	0.183	21	0.969	30.995	0.978
47	MRC_Harwell	Tnfaip1	Arhgef4	0.445	0.055	15	0.005	19.778	0.109
48	MRC_Harwell	Ttll4	Arhgef4	0.066	0.177	12	0.795	23.832	0.846
49	MRC_Harwell	Elk4	baseline	0.173	0.168	402	0.189	21.160	0.519
50	MRC_Harwell	Setmar	baseline	-0.069	0.169	405	0.550	18.927	0.790
51	MRC_Harwell	Slc38a10	baseline	-0.282	0.173	411	0.004	16.762	0.272
52	MRC_Harwell	Tnfaip1	baseline	0.172	0.168	405	0.139	18.875	0.511
53	MRC_Harwell	Ttll4	baseline	-0.207	0.173	402	0.120	21.420	0.443
54	MRC_Harwell	Setmar	Elk4	-0.242	0.076	21	0.049	18.278	0.357
55	MRC_Harwell	Slc38a10	Elk4	-0.455	0.154	27	0.006	23.109	0.112
56	MRC_Harwell	Tnfaip1	Elk4	-0.001	0.054	21	0.990	16.465	0.996
57	MRC_Harwell	Ttll4	Elk4	-0.380	0.135	18	0.033	23.435	0.190
58	MRC_Harwell	Slc38a10	Setmar	-0.213	0.167	30	0.158	22.435	0.441
59	MRC_Harwell	Tnfaip1	Setmar	0.241	0.083	24	0.043	18.029	0.357
60	MRC_Harwell	Ttll4	Setmar	-0.138	0.157	21	0.417	24.202	0.631
61	MRC_Harwell	Tnfaip1	Slc38a10	0.454	0.151	30	0.003	21.477	0.105
62	MRC_Harwell	Ttll4	Slc38a10	0.075	0.216	27	0.681	27.127	0.798
63	MRC_Harwell	Ttll4	Tnfaip1	-0.379	0.135	21	0.023	22.716	0.183

## 24 ESLIM\_\_009\_\_001\_\_701.Grip.Strength.Forelimb.grip.strength.measurem

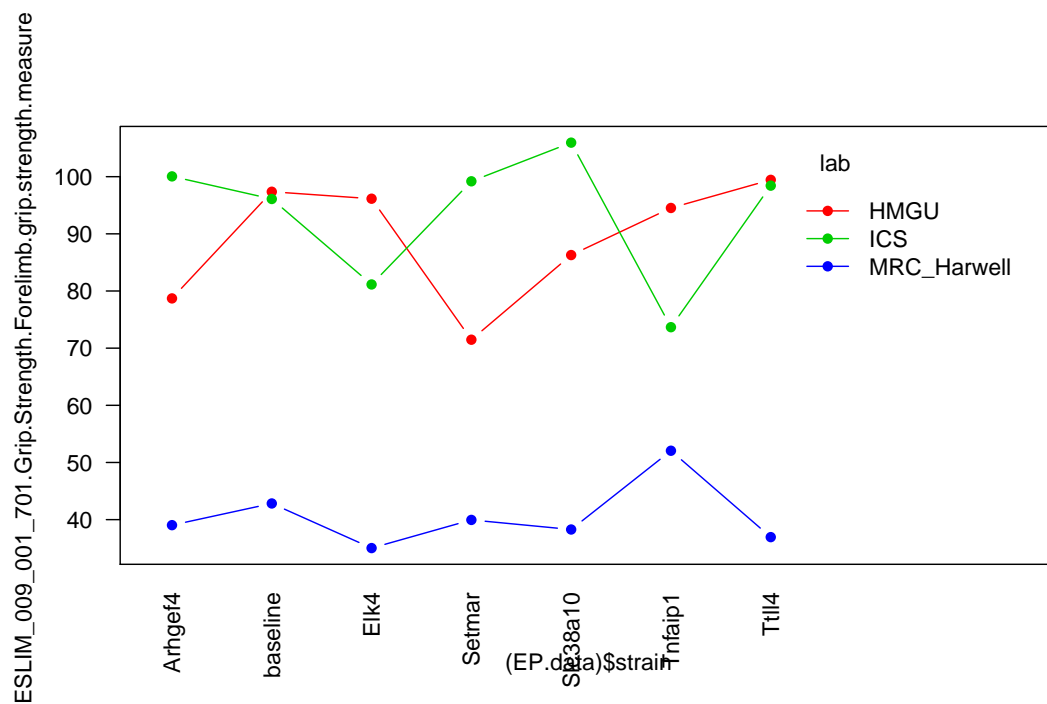
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	9
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	403
6	baseline	MRC_Harwell	392
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	11
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	78.70370	11.147302	9
2	Arhgef4	ICS	100.04762	7.907869	7
3	Arhgef4	MRC_Harwell	39.03333	7.659465	4
4	baseline	HMGU	97.36184	18.407240	304
5	baseline	ICS	96.09512	21.044060	403
6	baseline	MRC_Harwell	42.82918	12.248403	392
7	Elk4	HMGU	96.14286	14.220300	7
8	Elk4	ICS	81.14286	17.092187	7
9	Elk4	MRC_Harwell	35.02333	5.401647	10
10	Setmar	HMGU	71.47619	13.613524	7
11	Setmar	ICS	99.19048	15.582347	7
12	Setmar	MRC_Harwell	39.95128	8.186378	13
13	Slc38a10	HMGU	86.28571	10.497669	7
14	Slc38a10	ICS	105.95238	9.250483	7
15	Slc38a10	MRC_Harwell	38.27368	9.845320	19
16	Tnfaip1	HMGU	94.52381	8.328570	7
17	Tnfaip1	ICS	73.66667	13.748304	8
18	Tnfaip1	MRC_Harwell	52.05455	11.858417	11
19	Ttll4	HMGU	99.44444	12.221717	3
20	Ttll4	ICS	98.42857	14.195349	7
21	Ttll4	MRC_Harwell	36.94000	4.181523	10

S2.GxL= 79.87829 S2.GxL/S2.error= 0.27603974

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	16772.289	2795.381	9.663	0.000	0.314	0.918
lab	2	816748.194	408374.097	1411.725	0.000		
strain:lab	12	12620.981	1051.748	3.636	0.000		
Residuals	1228	355227.401	289.273				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	6.375	0.097	8.312	0.458
2	Elk4	Arhgef4	-1.708	0.740	9.011	0.853
3	Setmar	Arhgef4	-2.006	0.689	8.965	0.827
4	Slc38a10	Arhgef4	4.002	0.406	8.912	0.661
5	Tnfaip1	Arhgef4	1.299	0.797	8.963	0.887
6	Ttll4	Arhgef4	4.809	0.371	9.267	0.613
7	Elk4	baseline	-8.083	0.021	8.114	0.339
8	Setmar	baseline	-8.381	0.012	8.060	0.319
9	Slc38a10	baseline	-2.373	0.430	7.999	0.772
10	Tnfaip1	baseline	-5.076	0.133	8.059	0.541
11	Ttll4	baseline	-1.566	0.683	8.388	0.855

12	Setmar	Elk4	-0.298	0.950	8.773	0.973
13	Slc38a10	Elk4	5.710	0.211	8.716	0.525
14	Tnfaip1	Elk4	3.007	0.532	8.773	0.738
15	Ttll4	Elk4	6.517	0.206	9.074	0.486
16	Slc38a10	Setmar	6.008	0.174	8.664	0.501
17	Tnfaip1	Setmar	3.305	0.480	8.723	0.711
18	Ttll4	Setmar	6.815	0.175	9.023	0.465
19	Tnfaip1	Slc38a10	-2.703	0.545	8.665	0.760
20	Ttll4	Slc38a10	0.807	0.867	8.966	0.930
21	Ttll4	Tnfaip1	3.510	0.488	9.024	0.704

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	18.658	333.307	311	0.003	18.372	0.201
2	HMGU	Elk4	Arhgef4	17.439	157.671	14	0.015	17.810	0.233
3	HMGU	Setmar	Arhgef4	-7.228	150.433	14	0.262	17.565	0.614
4	HMGU	Slc38a10	Arhgef4	7.582	118.236	14	0.188	16.437	0.589
5	HMGU	Tnfaip1	Arhgef4	15.820	100.735	14	0.007	15.804	0.262
6	HMGU	Ttll4	Arhgef4	20.741	129.284	10	0.021	19.203	0.175
7	HMGU	Elk4	baseline	-1.219	336.174	309	0.862	20.441	0.934
8	HMGU	Setmar	baseline	-25.886	335.846	309	0.000	20.431	0.088
9	HMGU	Slc38a10	baseline	-11.076	334.387	309	0.114	20.390	0.452
10	HMGU	Tnfaip1	baseline	-2.838	333.594	309	0.685	20.368	0.846
11	HMGU	Ttll4	baseline	2.083	337.584	305	0.845	34.458	0.901
12	HMGU	Setmar	Elk4	-24.667	193.772	12	0.006	19.425	0.109
13	HMGU	Slc38a10	Elk4	-9.857	156.209	12	0.166	18.219	0.499
14	HMGU	Tnfaip1	Elk4	-1.619	135.791	12	0.799	17.504	0.910
15	HMGU	Ttll4	Elk4	3.302	189.005	8	0.737	19.870	0.837
16	HMGU	Slc38a10	Setmar	14.810	147.765	12	0.042	17.928	0.311
17	HMGU	Tnfaip1	Setmar	23.048	127.347	12	0.002	17.196	0.118
18	HMGU	Ttll4	Setmar	27.968	176.339	8	0.016	19.747	0.089
19	HMGU	Tnfaip1	Slc38a10	8.238	89.783	12	0.130	15.757	0.554
20	HMGU	Ttll4	Slc38a10	13.159	119.993	8	0.120	18.558	0.383
21	HMGU	Ttll4	Tnfaip1	4.921	89.366	8	0.472	17.393	0.734
22	ICS	baseline	Arhgef4	-3.952	437.260	408	0.620	23.337	0.794
23	ICS	Elk4	Arhgef4	-18.905	177.339	12	0.021	18.916	0.208
24	ICS	Setmar	Arhgef4	-0.857	152.672	12	0.899	18.098	0.953
25	ICS	Slc38a10	Arhgef4	5.905	74.053	12	0.223	15.124	0.667
26	ICS	Tnfaip1	Arhgef4	-26.381	130.640	13	0.001	17.076	0.076
27	ICS	Ttll4	Arhgef4	-1.619	132.021	12	0.797	17.367	0.910
28	ICS	Elk4	baseline	-14.952	440.636	408	0.062	23.438	0.328
29	ICS	Setmar	baseline	3.095	439.911	408	0.699	23.417	0.838
30	ICS	Slc38a10	baseline	9.857	437.598	408	0.217	23.348	0.516
31	ICS	Tnfaip1	baseline	-22.428	438.508	409	0.003	21.789	0.141
32	ICS	Ttll4	baseline	2.333	439.303	408	0.770	23.399	0.877
33	ICS	Setmar	Elk4	18.048	267.476	12	0.061	21.343	0.253

34	ICS	Slc38a10	Elk4	24.810	188.857	12	0.005	19.276	0.106
35	ICS	Tnfaip1	Elk4	-7.476	236.613	13	0.365	20.440	0.622
36	ICS	Ttll4	Elk4	17.286	246.825	12	0.062	20.867	0.268
37	ICS	Slc38a10	Setmar	6.762	164.190	12	0.343	18.488	0.644
38	ICS	Tnfaip1	Setmar	-25.524	213.844	13	0.005	19.798	0.099
39	ICS	Ttll4	Setmar	-0.762	222.159	12	0.925	20.236	0.960
40	ICS	Tnfaip1	Slc38a10	-32.286	141.272	13	0.000	17.454	0.034
41	ICS	Ttll4	Slc38a10	-7.524	143.540	12	0.263	17.780	0.602
42	ICS	Ttll4	Tnfaip1	24.762	194.781	13	0.004	19.225	0.105
43	MRC_Harwell	baseline	Arhgef4	3.796	149.328	394	0.537	18.303	0.790
44	MRC_Harwell	Elk4	Arhgef4	-4.010	36.550	12	0.284	13.910	0.765
45	MRC_Harwell	Setmar	Arhgef4	0.918	65.347	15	0.845	15.206	0.947
46	MRC_Harwell	Slc38a10	Arhgef4	-0.760	91.464	21	0.887	16.240	0.956
47	MRC_Harwell	Tnfaip1	Arhgef4	13.021	121.709	13	0.064	17.927	0.371
48	MRC_Harwell	Ttll4	Arhgef4	-2.093	27.781	12	0.515	13.455	0.875
49	MRC_Harwell	Elk4	baseline	-7.806	147.304	400	0.045	14.373	0.564
50	MRC_Harwell	Setmar	baseline	-2.878	147.552	403	0.401	13.824	0.829
51	MRC_Harwell	Slc38a10	baseline	-4.555	147.687	409	0.111	13.255	0.731
52	MRC_Harwell	Tnfaip1	baseline	9.225	149.789	401	0.014	14.192	0.495
53	MRC_Harwell	Ttll4	baseline	-5.889	147.041	400	0.130	14.368	0.663
54	MRC_Harwell	Setmar	Elk4	4.928	50.800	21	0.115	13.364	0.710
55	MRC_Harwell	Slc38a10	Elk4	3.250	74.346	27	0.343	13.734	0.807
56	MRC_Harwell	Tnfaip1	Elk4	17.031	87.833	19	0.001	14.550	0.220
57	MRC_Harwell	Ttll4	Elk4	1.917	23.331	18	0.387	12.704	0.884
58	MRC_Harwell	Slc38a10	Setmar	-1.678	84.965	30	0.617	13.685	0.900
59	MRC_Harwell	Tnfaip1	Setmar	12.103	100.474	22	0.007	14.578	0.377
60	MRC_Harwell	Ttll4	Setmar	-3.011	45.789	21	0.302	13.228	0.820
61	MRC_Harwell	Tnfaip1	Slc38a10	13.781	112.535	28	0.002	14.486	0.316
62	MRC_Harwell	Ttll4	Slc38a10	-1.334	70.449	27	0.687	13.642	0.920
63	MRC_Harwell	Ttll4	Tnfaip1	-15.115	82.294	19	0.001	14.388	0.272

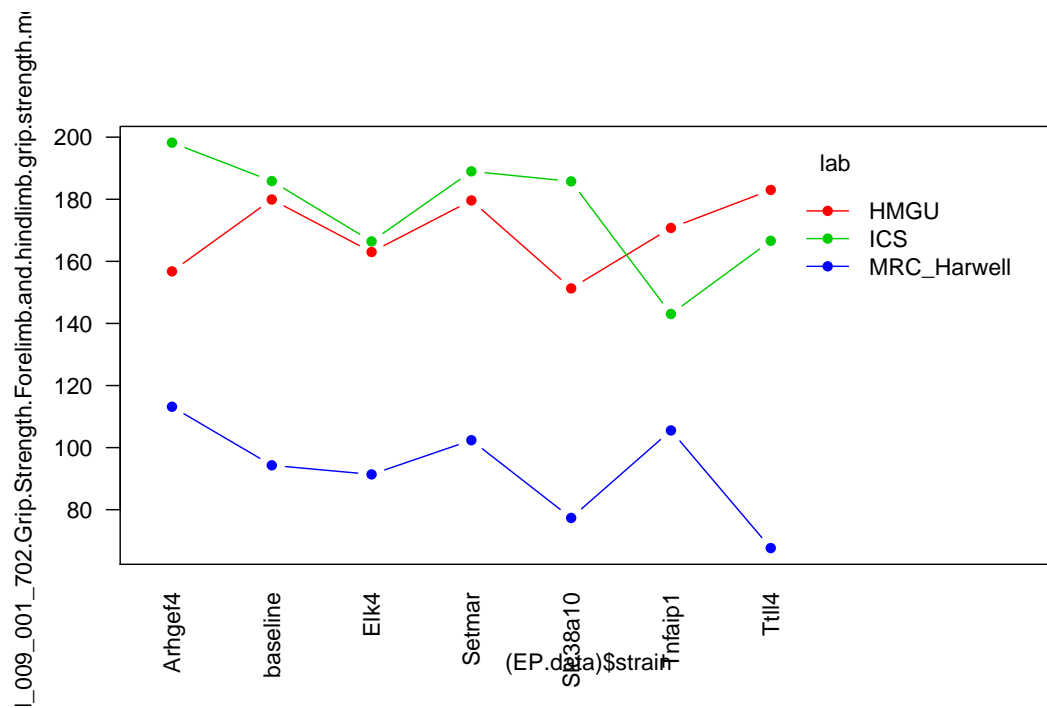
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count after filtering

	strain	lab	n
1	Arhgef4	HMGU	9
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	403
6	baseline	MRC_Harwell	392
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	11
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	156.77778	14.324610	9
2	Arhgef4	ICS	198.23810	15.802853	7
3	Arhgef4	MRC_Harwell	113.16667	4.719934	4
4	baseline	HMGU	179.91667	28.406377	304
5	baseline	ICS	185.84946	29.307050	403
6	baseline	MRC_Harwell	94.29520	22.099572	392
7	Elk4	HMGU	163.00000	19.556187	7
8	Elk4	ICS	166.42857	33.778535	7
9	Elk4	MRC_Harwell	91.37000	11.147900	10
10	Setmar	HMGU	179.61905	34.698398	7
11	Setmar	ICS	189.00000	27.645239	7
12	Setmar	MRC_Harwell	102.38462	14.415614	13
13	Slc38a10	HMGU	151.28571	21.662759	7
14	Slc38a10	ICS	185.76190	16.087394	7
15	Slc38a10	MRC_Harwell	77.34912	10.984278	19
16	Tnfaip1	HMGU	170.76190	11.026423	7
17	Tnfaip1	ICS	143.04167	18.574977	8
18	Tnfaip1	MRC_Harwell	105.53636	14.137731	11
19	Ttll4	HMGU	183.00000	31.708744	3
20	Ttll4	ICS	166.61905	28.056443	7
21	Ttll4	MRC_Harwell	67.63667	9.094870	10

S2.GxL= 157.5752 S2.GxL/S2.error= 0.23364661

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	74882.358	12480.393	18.517	0.000	1.048	0.442
lab	2	2217507.283	1108753.641	1645.042	0.000		
strain:lab	12	26901.430	2241.786	3.326	0.000		
Residuals	1228	827668.486	673.997				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-1.273	0.828	11.908	0.917
2	Elk4	Arhgef4	-14.205	0.071	13.039	0.297
3	Setmar	Arhgef4	2.245	0.769	12.964	0.865
4	Slc38a10	Arhgef4	-17.269	0.019	12.877	0.205
5	Tnfaip1	Arhgef4	-14.348	0.063	12.961	0.290
6	Ttll4	Arhgef4	-19.016	0.021	13.440	0.183
7	Elk4	baseline	-12.931	0.016	11.591	0.286
8	Setmar	baseline	3.518	0.487	11.502	0.765
9	Slc38a10	baseline	-15.996	0.001	11.399	0.186
10	Tnfaip1	baseline	-13.075	0.011	11.502	0.278
11	Ttll4	baseline	-17.743	0.003	12.023	0.166

12	Setmar	Elk4	16.450	0.024	12.658	0.218
13	Slc38a10	Elk4	-3.064	0.660	12.563	0.811
14	Tnfaip1	Elk4	-0.144	0.984	12.660	0.991
15	Ttll4	Elk4	-4.811	0.541	13.131	0.720
16	Slc38a10	Setmar	-19.514	0.004	12.476	0.144
17	Tnfaip1	Setmar	-16.593	0.020	12.577	0.212
18	Ttll4	Setmar	-21.261	0.006	13.048	0.129
19	Tnfaip1	Slc38a10	2.921	0.668	12.480	0.819
20	Ttll4	Slc38a10	-1.747	0.812	12.953	0.895
21	Ttll4	Tnfaip1	-4.667	0.546	13.050	0.727

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	23.139	791.444	311	0.016	19.822	0.264
2	HMGU	Elk4	Arhgef4	6.222	281.159	14	0.474	17.293	0.755
3	HMGU	Setmar	Arhgef4	22.841	633.245	14	0.093	22.377	0.306
4	HMGU	Slc38a10	Arhgef4	-5.492	318.372	14	0.551	17.935	0.786
5	HMGU	Tnfaip1	Arhgef4	13.984	169.361	14	0.051	15.256	0.471
6	HMGU	Ttll4	Arhgef4	26.222	365.244	10	0.067	20.894	0.244
7	HMGU	Elk4	baseline	-16.917	798.680	309	0.118	22.416	0.424
8	HMGU	Setmar	baseline	-0.298	814.632	309	0.978	22.654	0.989
9	HMGU	Slc38a10	baseline	-28.631	800.366	309	0.009	22.441	0.182
10	HMGU	Tnfaip1	baseline	-9.155	793.615	309	0.396	22.340	0.664
11	HMGU	Ttll4	baseline	3.083	808.224	305	0.852	40.475	0.899
12	HMGU	Setmar	Elk4	16.619	793.212	12	0.291	23.376	0.482
13	HMGU	Slc38a10	Elk4	-11.714	425.860	12	0.309	20.064	0.581
14	HMGU	Tnfaip1	Elk4	7.762	252.013	12	0.378	17.211	0.698
15	HMGU	Ttll4	Elk4	20.000	538.194	8	0.247	19.806	0.413
16	HMGU	Slc38a10	Setmar	-28.333	836.627	12	0.092	23.556	0.241
17	HMGU	Tnfaip1	Setmar	-8.857	662.780	12	0.532	22.595	0.697
18	HMGU	Ttll4	Setmar	3.381	1154.345	8	0.889	16.243	0.910
19	HMGU	Tnfaip1	Slc38a10	19.476	295.429	12	0.056	17.998	0.343
20	HMGU	Ttll4	Slc38a10	31.714	603.317	8	0.098	19.519	0.211
21	HMGU	Ttll4	Tnfaip1	12.238	342.548	8	0.366	19.715	0.582
22	ICS	baseline	Arhgef4	-12.389	849.945	408	0.266	23.146	0.560
23	ICS	Elk4	Arhgef4	-31.810	695.360	12	0.043	22.827	0.174
24	ICS	Setmar	Arhgef4	-9.238	506.995	12	0.458	21.107	0.671
25	ICS	Slc38a10	Arhgef4	-12.476	254.267	12	0.169	17.253	0.535
26	ICS	Tnfaip1	Arhgef4	-55.196	301.045	13	0.000	17.848	0.013
27	ICS	Ttll4	Arhgef4	-31.619	518.447	12	0.023	21.239	0.156
28	ICS	Elk4	baseline	-19.421	863.052	408	0.084	23.345	0.364
29	ICS	Setmar	baseline	3.151	857.511	408	0.778	23.261	0.882
30	ICS	Slc38a10	baseline	-0.088	850.078	408	0.994	23.148	0.997
31	ICS	Tnfaip1	baseline	-42.808	850.108	409	0.000	21.597	0.050
32	ICS	Ttll4	baseline	-19.230	857.848	408	0.086	23.266	0.369
33	ICS	Setmar	Elk4	22.571	952.624	12	0.196	23.872	0.361



34	ICS	Slc38a10	Elk4	19.333	699.897	12	0.197	22.857	0.403
35	ICS	Tnfaip1	Elk4	-23.387	712.396	13	0.114	23.110	0.309
36	ICS	Ttll4	Elk4	0.190	964.077	12	0.991	23.892	0.994
37	ICS	Slc38a10	Setmar	-3.238	511.532	12	0.793	21.160	0.882
38	ICS	Tnfaip1	Setmar	-45.958	538.520	13	0.002	21.367	0.044
39	ICS	Ttll4	Setmar	-22.381	775.712	12	0.159	23.293	0.344
40	ICS	Tnfaip1	Slc38a10	-42.720	305.233	13	0.000	17.921	0.046
41	ICS	Ttll4	Slc38a10	-19.143	522.984	12	0.143	21.291	0.384
42	ICS	Ttll4	Tnfaip1	23.577	549.092	13	0.074	21.493	0.285
43	MRC_Harwell	baseline	Arhgef4	-18.871	484.842	394	0.089	23.031	0.376
44	MRC_Harwell	Elk4	Arhgef4	-21.797	98.776	12	0.003	14.601	0.262
45	MRC_Harwell	Setmar	Arhgef4	-10.782	170.703	15	0.169	16.219	0.583
46	MRC_Harwell	Slc38a10	Arhgef4	-35.818	106.601	21	0.000	14.496	0.075
47	MRC_Harwell	Tnfaip1	Arhgef4	-7.630	158.891	13	0.319	16.042	0.697
48	MRC_Harwell	Ttll4	Arhgef4	-45.530	67.607	12	0.000	13.792	0.027
49	MRC_Harwell	Elk4	baseline	-2.925	480.198	400	0.677	16.031	0.880
50	MRC_Harwell	Setmar	baseline	8.089	480.036	403	0.191	15.075	0.673
51	MRC_Harwell	Slc38a10	baseline	-16.946	472.207	409	0.001	14.064	0.374
52	MRC_Harwell	Tnfaip1	baseline	11.241	481.196	401	0.094	15.660	0.562
53	MRC_Harwell	Ttll4	baseline	-26.659	479.263	400	0.000	16.023	0.182
54	MRC_Harwell	Setmar	Elk4	11.015	172.010	21	0.059	14.353	0.563
55	MRC_Harwell	Slc38a10	Elk4	-14.021	121.861	27	0.003	13.437	0.456
56	MRC_Harwell	Tnfaip1	Elk4	14.166	164.065	19	0.020	14.414	0.459
57	MRC_Harwell	Ttll4	Elk4	-23.733	103.496	18	0.000	13.589	0.217
58	MRC_Harwell	Slc38a10	Setmar	-25.035	155.517	30	0.000	13.561	0.194
59	MRC_Harwell	Tnfaip1	Setmar	3.152	204.203	22	0.596	14.657	0.868
60	MRC_Harwell	Ttll4	Setmar	-34.748	154.199	21	0.000	14.107	0.081
61	MRC_Harwell	Tnfaip1	Slc38a10	28.187	148.948	28	0.000	13.656	0.147
62	MRC_Harwell	Ttll4	Slc38a10	-9.712	108.008	27	0.024	13.272	0.603
63	MRC_Harwell	Ttll4	Tnfaip1	-37.900	144.379	19	0.000	14.123	0.060

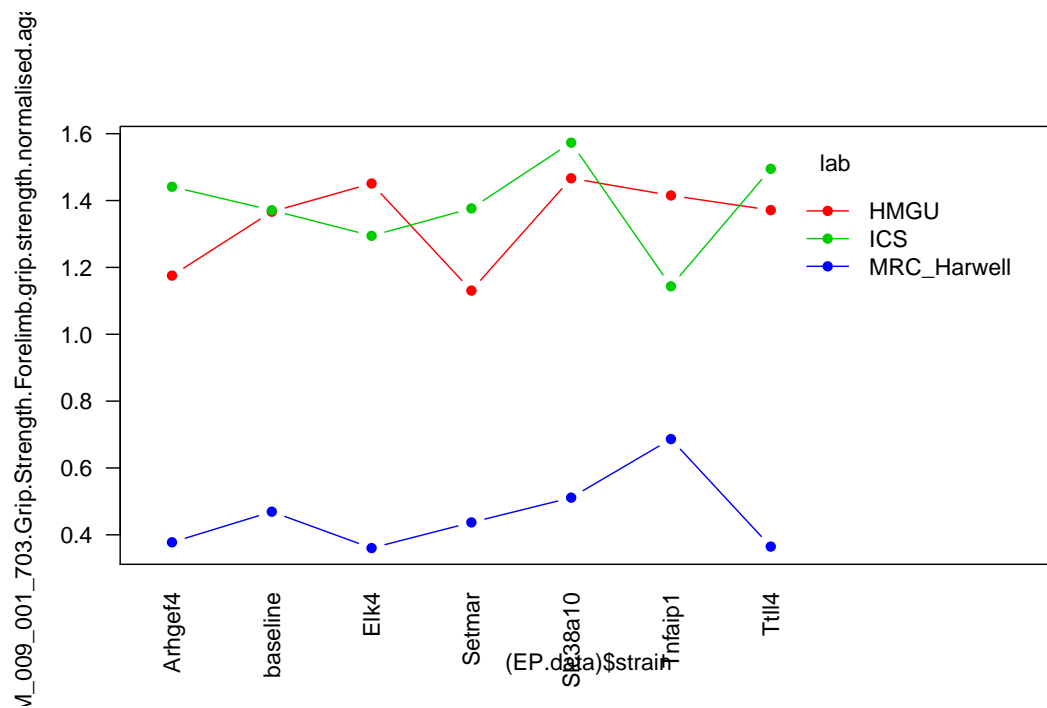
## 26 ESLIM\_\_009\_\_001\_\_703.Grip.Strength.Forelimb.grip.strength.normalised

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	9
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	403
6	baseline	MRC_Harwell	392
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	11
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	1.1755162	0.15149962	9
2	Arhgef4	ICS	1.4413311	0.10943245	7
3	Arhgef4	MRC_Harwell	0.3776430	0.21749749	4
4	baseline	HMGU	1.3665785	0.17725623	304
5	baseline	ICS	1.3710517	0.23602168	403
6	baseline	MRC_Harwell	0.4691731	0.28512977	392
7	Elk4	HMGU	1.4510557	0.15474166	7
8	Elk4	ICS	1.2945896	0.17435727	7
9	Elk4	MRC_Harwell	0.3603191	0.13855498	10
10	Setmar	HMGU	1.1306156	0.19303743	7
11	Setmar	ICS	1.3764830	0.13304566	7
12	Setmar	MRC_Harwell	0.4370233	0.20250050	13
13	Slc38a10	HMGU	1.4666328	0.11582919	7
14	Slc38a10	ICS	1.5732470	0.09058236	7
15	Slc38a10	MRC_Harwell	0.5111898	0.27599407	19
16	Tnfaip1	HMGU	1.4152523	0.07943194	7
17	Tnfaip1	ICS	1.1434040	0.16416319	8
18	Tnfaip1	MRC_Harwell	0.6864923	0.21760216	11
19	Ttll4	HMGU	1.3714255	0.20206391	3
20	Ttll4	ICS	1.4949177	0.13833385	7
21	Ttll4	MRC_Harwell	0.3648091	0.08922575	10

S2.GxL= 0.01166 S2.GxL/S2.error= 0.21090351

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	1.896	0.316	5.715	0.000	0.681	0.669
lab	2	232.712	116.356	2104.686	0.000		
strain:lab	12	1.946	0.162	2.934	0.000		
Residuals	1228	67.889	0.055				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.072	0.174	0.104	0.501
2	Elk4	Arhgef4	0.035	0.623	0.114	0.765
3	Setmar	Arhgef4	-0.012	0.865	0.114	0.919
4	Slc38a10	Arhgef4	0.179	0.007	0.113	0.139
5	Tnfaip1	Arhgef4	0.091	0.192	0.114	0.437
6	Ttll4	Arhgef4	0.072	0.331	0.118	0.552
7	Elk4	baseline	-0.037	0.445	0.101	0.720
8	Setmar	baseline	-0.084	0.067	0.100	0.418
9	Slc38a10	baseline	0.107	0.010	0.099	0.302
10	Tnfaip1	baseline	0.019	0.680	0.100	0.851
11	Ttll4	baseline	0.000	0.998	0.105	0.999

12	Setmar	Elk4	-0.047	0.478	0.111	0.680
13	Slc38a10	Elk4	0.144	0.023	0.110	0.215
14	Tnfaip1	Elk4	0.056	0.397	0.111	0.621
15	Ttll4	Elk4	0.037	0.601	0.115	0.752
16	Slc38a10	Setmar	0.191	0.002	0.109	0.106
17	Tnfaip1	Setmar	0.103	0.111	0.110	0.367
18	Ttll4	Setmar	0.084	0.226	0.114	0.477
19	Tnfaip1	Slc38a10	-0.088	0.155	0.109	0.438
20	Ttll4	Slc38a10	-0.107	0.109	0.114	0.366
21	Ttll4	Tnfaip1	-0.019	0.785	0.114	0.870

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.191	0.031	311	0.002	15.939	0.261
2	HMGU	Elk4	Arhgef4	0.276	0.023	14	0.003	17.893	0.125
3	HMGU	Setmar	Arhgef4	-0.045	0.029	14	0.610	19.157	0.801
4	HMGU	Slc38a10	Arhgef4	0.291	0.019	14	0.001	16.828	0.101
5	HMGU	Tnfaip1	Arhgef4	0.240	0.016	14	0.002	16.081	0.166
6	HMGU	Ttll4	Arhgef4	0.196	0.027	10	0.101	20.815	0.308
7	HMGU	Elk4	baseline	0.084	0.031	309	0.212	17.138	0.619
8	HMGU	Setmar	baseline	-0.236	0.032	309	0.001	17.184	0.176
9	HMGU	Slc38a10	baseline	0.100	0.031	309	0.139	17.102	0.557
10	HMGU	Tnfaip1	baseline	0.049	0.031	309	0.470	17.077	0.774
11	HMGU	Ttll4	baseline	0.005	0.031	305	0.962	25.177	0.979
12	HMGU	Setmar	Elk4	-0.320	0.031	12	0.005	19.888	0.089
13	HMGU	Slc38a10	Elk4	0.016	0.019	12	0.835	17.219	0.928
14	HMGU	Tnfaip1	Elk4	-0.036	0.015	12	0.596	16.299	0.832
15	HMGU	Ttll4	Elk4	-0.080	0.028	8	0.511	19.899	0.682
16	HMGU	Slc38a10	Setmar	0.336	0.025	12	0.002	18.795	0.070
17	HMGU	Tnfaip1	Setmar	0.285	0.022	12	0.004	17.979	0.115
18	HMGU	Ttll4	Setmar	0.241	0.038	8	0.112	19.881	0.251
19	HMGU	Tnfaip1	Slc38a10	-0.051	0.010	12	0.352	14.858	0.755
20	HMGU	Ttll4	Slc38a10	-0.095	0.020	8	0.361	19.084	0.606
21	HMGU	Ttll4	Tnfaip1	-0.044	0.015	8	0.617	17.934	0.805
22	ICS	baseline	Arhgef4	-0.070	0.055	408	0.433	21.572	0.695
23	ICS	Elk4	Arhgef4	-0.147	0.021	12	0.084	17.836	0.403
24	ICS	Setmar	Arhgef4	-0.065	0.015	12	0.339	16.223	0.701
25	ICS	Slc38a10	Arhgef4	0.132	0.010	12	0.030	14.922	0.428
26	ICS	Tnfaip1	Arhgef4	-0.298	0.020	13	0.001	17.312	0.096
27	ICS	Ttll4	Arhgef4	0.054	0.016	12	0.437	16.413	0.752
28	ICS	Elk4	baseline	-0.076	0.055	408	0.394	21.626	0.670
29	ICS	Setmar	baseline	0.005	0.055	408	0.952	21.589	0.976
30	ICS	Slc38a10	baseline	0.202	0.055	408	0.024	21.561	0.266
31	ICS	Tnfaip1	baseline	-0.228	0.055	409	0.007	20.281	0.206
32	ICS	Ttll4	baseline	0.124	0.055	408	0.167	21.593	0.492
33	ICS	Setmar	Elk4	0.082	0.024	12	0.343	18.506	0.643

34	ICS	Slc38a10	Elk4	0.279	0.019	12	0.003	17.374	0.119
35	ICS	Tnfaip1	Elk4	-0.151	0.029	13	0.107	19.247	0.401
36	ICS	Ttll4	Elk4	0.200	0.025	12	0.035	18.668	0.265
37	ICS	Slc38a10	Setmar	0.197	0.013	12	0.007	15.714	0.249
38	ICS	Tnfaip1	Setmar	-0.233	0.023	13	0.010	17.942	0.191
39	ICS	Ttll4	Setmar	0.118	0.018	12	0.128	17.152	0.493
40	ICS	Tnfaip1	Slc38a10	-0.430	0.018	13	0.000	16.885	0.020
41	ICS	Ttll4	Slc38a10	-0.078	0.014	12	0.234	15.909	0.641
42	ICS	Ttll4	Tnfaip1	0.352	0.023	13	0.001	18.096	0.056
43	MRC_Harwell	baseline	Arhgef4	0.092	0.081	394	0.523	41.329	0.664
44	MRC_Harwell	Elk4	Arhgef4	-0.017	0.026	12	0.860	20.178	0.924
45	MRC_Harwell	Setmar	Arhgef4	0.059	0.042	15	0.621	23.759	0.761
46	MRC_Harwell	Slc38a10	Arhgef4	0.134	0.072	21	0.376	29.961	0.534
47	MRC_Harwell	Tnfaip1	Arhgef4	0.309	0.047	13	0.030	23.823	0.133
48	MRC_Harwell	Ttll4	Arhgef4	-0.013	0.018	12	0.874	17.983	0.941
49	MRC_Harwell	Elk4	baseline	-0.109	0.080	400	0.230	21.831	0.546
50	MRC_Harwell	Setmar	baseline	-0.032	0.080	403	0.687	19.401	0.854
51	MRC_Harwell	Slc38a10	baseline	0.042	0.081	409	0.530	17.026	0.804
52	MRC_Harwell	Tnfaip1	baseline	0.217	0.080	401	0.013	20.919	0.230
53	MRC_Harwell	Ttll4	baseline	-0.104	0.080	400	0.249	21.796	0.563
54	MRC_Harwell	Setmar	Elk4	0.077	0.032	21	0.317	17.867	0.657
55	MRC_Harwell	Slc38a10	Elk4	0.151	0.057	27	0.118	21.333	0.409
56	MRC_Harwell	Tnfaip1	Elk4	0.326	0.034	19	0.001	18.696	0.075
57	MRC_Harwell	Ttll4	Elk4	0.004	0.014	18	0.932	14.823	0.978
58	MRC_Harwell	Slc38a10	Setmar	0.074	0.062	30	0.415	20.721	0.680
59	MRC_Harwell	Tnfaip1	Setmar	0.249	0.044	22	0.008	19.704	0.170
60	MRC_Harwell	Ttll4	Setmar	-0.072	0.027	21	0.307	16.982	0.672
61	MRC_Harwell	Tnfaip1	Slc38a10	0.175	0.066	28	0.082	22.143	0.343
62	MRC_Harwell	Ttll4	Slc38a10	-0.146	0.053	27	0.117	20.732	0.419
63	MRC_Harwell	Ttll4	Tnfaip1	-0.322	0.029	19	0.000	17.682	0.075

## 27 ESLIM\_\_009\_\_001\_\_704.Grip.Strength.Forelimb.and.hindlimb.grip.stren

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	9
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	403
6	baseline	MRC_Harwell	392
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	11
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	1.8691313	0.11267626	9
2	Arhgef4	ICS	2.1252155	0.07436417	7
3	Arhgef4	MRC_Harwell	1.4565538	0.06128638	4
4	baseline	HMGU	1.9848162	0.15730161	304
5	baseline	ICS	2.0427857	0.17283572	403
6	baseline	MRC_Harwell	1.2700762	0.23928380	392
7	Elk4	HMGU	1.9822328	0.10499097	7
8	Elk4	ICS	2.0159090	0.11800169	7
9	Elk4	MRC_Harwell	1.3248414	0.09065548	10
10	Setmar	HMGU	2.0530006	0.19734952	7
11	Setmar	ICS	2.0226834	0.14750884	7
12	Setmar	MRC_Harwell	1.3871931	0.14427312	13
13	Slc38a10	HMGU	2.0252403	0.11475091	7
14	Slc38a10	ICS	2.1345038	0.11153527	7
15	Slc38a10	MRC_Harwell	1.2365407	0.17809977	19
16	Tnfaip1	HMGU	2.0082664	0.06739496	7
17	Tnfaip1	ICS	1.8138644	0.13428560	8
18	Tnfaip1	MRC_Harwell	1.4106037	0.15500653	11
19	Ttll4	HMGU	1.9759326	0.09236719	3
20	Ttll4	ICS	2.0184671	0.19629564	7
21	Ttll4	MRC_Harwell	0.9665238	0.19874276	10

S2.GxL= 0.01052 S2.GxL/S2.error= 0.28951731

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	2.559	0.427	11.744	0.000	0.715	0.645
lab	2	159.567	79.784	2196.775	0.000		
strain:lab	12	1.547	0.129	3.550	0.000		
Residuals	1228	44.599	0.036				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.039	0.364	0.095	0.688
2	Elk4	Arhgef4	-0.030	0.605	0.103	0.776
3	Setmar	Arhgef4	0.018	0.747	0.102	0.862
4	Slc38a10	Arhgef4	-0.014	0.802	0.102	0.896
5	Tnfaip1	Arhgef4	-0.057	0.312	0.102	0.585
6	Ttll4	Arhgef4	-0.172	0.004	0.105	0.129
7	Elk4	baseline	0.009	0.815	0.093	0.923
8	Setmar	baseline	0.057	0.124	0.092	0.546
9	Slc38a10	baseline	0.026	0.449	0.091	0.785
10	Tnfaip1	baseline	-0.018	0.629	0.092	0.846
11	Ttll4	baseline	-0.133	0.002	0.096	0.191



12	Setmar	Elk4	0.048	0.370	0.100	0.640
13	Slc38a10	Elk4	0.016	0.750	0.099	0.872
14	Tnfaip1	Elk4	-0.028	0.610	0.100	0.788
15	Ttll4	Elk4	-0.142	0.014	0.103	0.195
16	Slc38a10	Setmar	-0.032	0.522	0.099	0.754
17	Tnfaip1	Setmar	-0.075	0.150	0.099	0.462
18	Ttll4	Setmar	-0.190	0.001	0.103	0.089
19	Tnfaip1	Slc38a10	-0.044	0.381	0.099	0.665
20	Ttll4	Slc38a10	-0.158	0.003	0.102	0.147
21	Ttll4	Tnfaip1	-0.114	0.044	0.103	0.287

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.116	0.024	311	0.029	15.390	0.465
2	HMGU	Elk4	Arhgef4	0.113	0.012	14	0.060	15.445	0.477
3	HMGU	Setmar	Arhgef4	0.184	0.024	14	0.033	18.608	0.278
4	HMGU	Slc38a10	Arhgef4	0.156	0.013	14	0.016	15.702	0.332
5	HMGU	Tnfaip1	Arhgef4	0.139	0.009	14	0.012	14.659	0.378
6	HMGU	Ttll4	Arhgef4	0.107	0.012	10	0.172	17.453	0.519
7	HMGU	Elk4	baseline	-0.003	0.024	309	0.966	16.410	0.987
8	HMGU	Setmar	baseline	0.068	0.025	309	0.260	16.515	0.670
9	HMGU	Slc38a10	baseline	0.040	0.025	309	0.500	16.418	0.800
10	HMGU	Tnfaip1	baseline	0.023	0.024	309	0.695	16.385	0.883
11	HMGU	Ttll4	baseline	-0.009	0.025	305	0.922	23.185	0.959
12	HMGU	Setmar	Elk4	0.071	0.025	12	0.419	19.303	0.678
13	HMGU	Slc38a10	Elk4	0.043	0.012	12	0.478	15.839	0.787
14	HMGU	Tnfaip1	Elk4	0.026	0.008	12	0.591	14.509	0.867
15	HMGU	Ttll4	Elk4	-0.006	0.010	8	0.931	16.909	0.969
16	HMGU	Slc38a10	Setmar	-0.028	0.026	12	0.753	19.548	0.871
17	HMGU	Tnfaip1	Setmar	-0.045	0.022	12	0.581	18.519	0.789
18	HMGU	Ttll4	Setmar	-0.077	0.031	8	0.546	19.981	0.689
19	HMGU	Tnfaip1	Slc38a10	-0.017	0.009	12	0.742	14.845	0.913
20	HMGU	Ttll4	Slc38a10	-0.049	0.012	8	0.533	17.474	0.767
21	HMGU	Ttll4	Tnfaip1	-0.032	0.006	8	0.547	14.848	0.836
22	ICS	baseline	Arhgef4	-0.082	0.030	408	0.209	17.372	0.611
23	ICS	Elk4	Arhgef4	-0.109	0.010	12	0.060	15.116	0.490
24	ICS	Setmar	Arhgef4	-0.103	0.014	12	0.126	16.300	0.525
25	ICS	Slc38a10	Arhgef4	0.009	0.009	12	0.858	14.886	0.953
26	ICS	Tnfaip1	Arhgef4	-0.311	0.012	13	0.000	15.687	0.064
27	ICS	Ttll4	Arhgef4	-0.107	0.022	12	0.203	18.591	0.526
28	ICS	Elk4	baseline	-0.027	0.030	408	0.682	17.396	0.868
29	ICS	Setmar	baseline	-0.020	0.030	408	0.760	17.419	0.901
30	ICS	Slc38a10	baseline	0.092	0.030	408	0.163	17.392	0.572
31	ICS	Tnfaip1	baseline	-0.229	0.030	409	0.000	16.687	0.165
32	ICS	Ttll4	baseline	-0.024	0.030	408	0.713	17.468	0.880
33	ICS	Setmar	Elk4	0.007	0.018	12	0.926	17.493	0.967

34	ICS	Slc38a10	Elk4	0.119	0.013	12	0.077	16.163	0.462
35	ICS	Tnfaip1	Elk4	-0.202	0.016	13	0.009	16.784	0.222
36	ICS	Ttll4	Elk4	0.003	0.026	12	0.977	19.587	0.988
37	ICS	Slc38a10	Setmar	0.112	0.017	12	0.136	17.289	0.497
38	ICS	Tnfaip1	Setmar	-0.209	0.020	13	0.013	17.758	0.215
39	ICS	Ttll4	Setmar	-0.004	0.030	12	0.965	20.416	0.981
40	ICS	Tnfaip1	Slc38a10	-0.321	0.015	13	0.000	16.593	0.060
41	ICS	Ttll4	Slc38a10	-0.116	0.025	12	0.199	19.419	0.499
42	ICS	Ttll4	Tnfaip1	0.205	0.027	13	0.033	19.650	0.239
43	MRC_Harwell	baseline	Arhgef4	-0.186	0.057	394	0.120	33.494	0.329
44	MRC_Harwell	Elk4	Arhgef4	-0.132	0.007	12	0.022	14.797	0.404
45	MRC_Harwell	Setmar	Arhgef4	-0.069	0.017	15	0.372	18.298	0.676
46	MRC_Harwell	Slc38a10	Arhgef4	-0.220	0.028	21	0.026	21.525	0.213
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.046	0.019	13	0.581	18.983	0.785
48	MRC_Harwell	Ttll4	Arhgef4	-0.490	0.031	12	0.000	21.697	0.012
49	MRC_Harwell	Elk4	baseline	0.055	0.056	400	0.471	19.425	0.742
50	MRC_Harwell	Setmar	baseline	0.117	0.056	403	0.080	17.610	0.473
51	MRC_Harwell	Slc38a10	baseline	-0.034	0.056	409	0.547	15.784	0.832
52	MRC_Harwell	Tnfaip1	baseline	0.141	0.056	401	0.054	18.736	0.397
53	MRC_Harwell	Ttll4	baseline	-0.304	0.057	400	0.000	19.529	0.079
54	MRC_Harwell	Setmar	Elk4	0.062	0.015	21	0.246	15.168	0.692
55	MRC_Harwell	Slc38a10	Elk4	-0.088	0.024	27	0.155	16.302	0.582
56	MRC_Harwell	Tnfaip1	Elk4	0.086	0.017	19	0.143	15.650	0.589
57	MRC_Harwell	Ttll4	Elk4	-0.358	0.024	18	0.000	17.462	0.039
58	MRC_Harwell	Slc38a10	Setmar	-0.151	0.027	30	0.017	16.200	0.351
59	MRC_Harwell	Tnfaip1	Setmar	0.023	0.022	22	0.705	16.362	0.884
60	MRC_Harwell	Ttll4	Setmar	-0.421	0.029	21	0.000	17.921	0.018
61	MRC_Harwell	Tnfaip1	Slc38a10	0.174	0.029	28	0.012	16.930	0.288
62	MRC_Harwell	Ttll4	Slc38a10	-0.270	0.034	27	0.001	18.217	0.113
63	MRC_Harwell	Ttll4	Tnfaip1	-0.444	0.031	19	0.000	18.838	0.014

## 28 ESLIM\_011\_001\_001.Acoustic.Startle.PPI.BN.startle.magnitude.

count after filtering

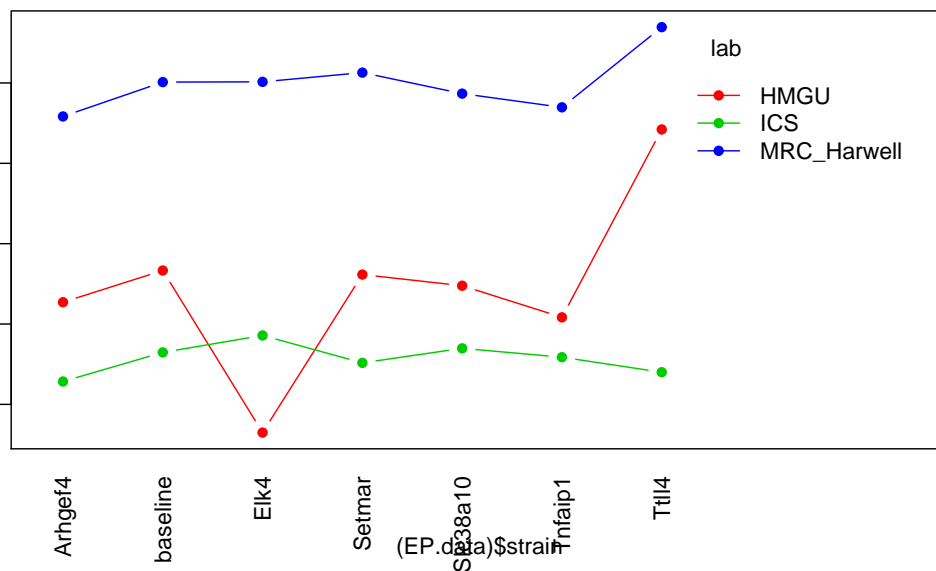
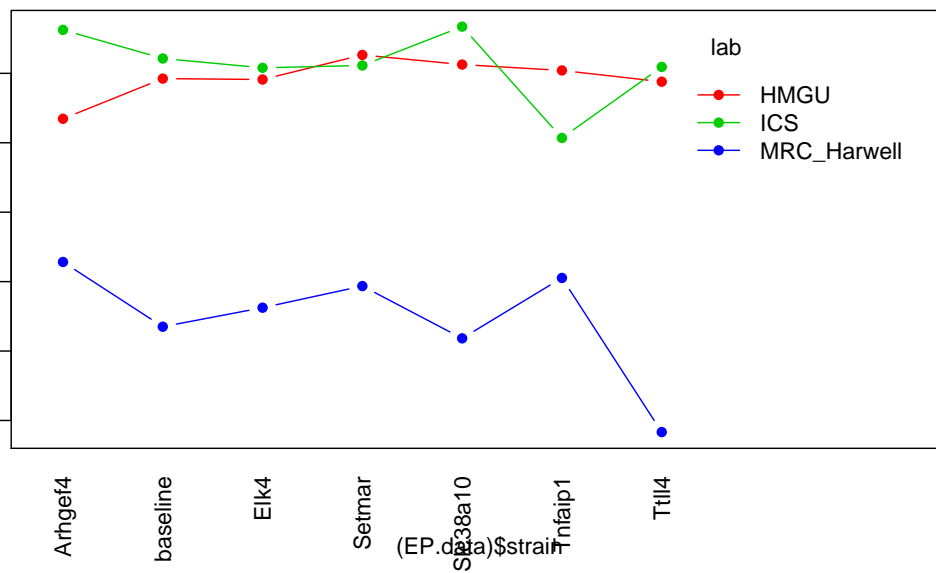
	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	380
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Warning in RET\$pfunction("adjusted", ...): Completion with error > abseps

mean of ESLIM\_011\_001\_Acoustic.Startle.PPI.BN.startle.magnit\_001\_704.Grip.Strength.Forelimb.and.hindlimb.grip.strength.normal



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.635598	0.3038191	10
2	Arhgef4	ICS	3.142321	0.2739263	7
3	Arhgef4	MRC_Harwell	4.791701	0.7338082	4
4	baseline	HMGU	3.833008	0.3016125	281
5	baseline	ICS	3.323426	0.4909334	400
6	baseline	MRC_Harwell	5.005401	0.5068017	380
7	Elk4	HMGU	2.824490	1.2849269	7
8	Elk4	ICS	3.428877	0.4747889	7
9	Elk4	MRC_Harwell	5.006985	0.5651838	10
10	Setmar	HMGU	3.807718	0.3003544	7
11	Setmar	ICS	3.258293	0.3966476	7
12	Setmar	MRC_Harwell	5.064373	0.3321841	13
13	Slc38a10	HMGU	3.738358	0.1826985	7
14	Slc38a10	ICS	3.348711	0.3786357	7
15	Slc38a10	MRC_Harwell	4.933652	0.5126831	18
16	Tnfaip1	HMGU	3.541658	0.3139207	7
17	Tnfaip1	ICS	3.293554	0.2384568	8
18	Tnfaip1	MRC_Harwell	4.848402	0.4072932	13
19	Ttll4	HMGU	4.710760	0.2296803	3
20	Ttll4	ICS	3.200087	0.2223434	7
21	Ttll4	MRC_Harwell	5.347388	0.4129997	9

S2.GxL= 0.05347 S2.GxL/S2.error= 0.25524838

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	9.715	1.619	7.741	0.000	1.240	0.352
lab	2	657.606	328.803	1572.095	0.000		
strain:lab	12	8.066	0.672	3.214	0.000		
Residuals	1191	249.097	0.209				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.191	0.059	0.216	0.396
2	Elk4	Arhgef4	-0.100	0.466	0.236	0.680
3	Setmar	Arhgef4	0.182	0.171	0.234	0.452
4	Slc38a10	Arhgef4	0.138	0.282	0.233	0.564
5	Tnfaip1	Arhgef4	0.031	0.817	0.234	0.898
6	Ttll4	Arhgef4	0.486	0.001	0.243	0.069
7	Elk4	baseline	-0.290	0.002	0.212	0.195
8	Setmar	baseline	-0.008	0.924	0.210	0.969
9	Slc38a10	baseline	-0.052	0.524	0.209	0.806
10	Tnfaip1	baseline	-0.160	0.068	0.209	0.459
11	Ttll4	baseline	0.296	0.005	0.220	0.203

12	Setmar	Elk4	0.282	0.028	0.230	0.244
13	Slc38a10	Elk4	0.238	0.054	0.228	0.318
14	Tnfaip1	Elk4	0.130	0.306	0.229	0.580
15	Ttll4	Elk4	0.586	0.000	0.239	0.030
16	Slc38a10	Setmar	-0.044	0.714	0.227	0.850
17	Tnfaip1	Setmar	-0.152	0.219	0.228	0.518
18	Ttll4	Setmar	0.304	0.027	0.237	0.224
19	Tnfaip1	Slc38a10	-0.108	0.363	0.226	0.642
20	Ttll4	Slc38a10	0.348	0.009	0.236	0.166
21	Ttll4	Tnfaip1	0.456	0.001	0.237	0.078

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.197	0.091	289	0.043	14.204	0.572
2	HMGU	Elk4	Arhgef4	-0.811	0.716	15	0.071	26.565	0.138
3	HMGU	Setmar	Arhgef4	0.172	0.091	15	0.266	16.919	0.638
4	HMGU	Slc38a10	Arhgef4	0.103	0.069	15	0.439	15.732	0.774
5	HMGU	Tnfaip1	Arhgef4	-0.094	0.095	15	0.545	17.089	0.798
6	HMGU	Ttll4	Arhgef4	1.075	0.085	11	0.000	19.211	0.011
7	HMGU	Elk4	baseline	-1.009	0.124	286	0.000	16.389	0.011
8	HMGU	Setmar	baseline	-0.025	0.091	286	0.827	15.165	0.943
9	HMGU	Slc38a10	baseline	-0.095	0.090	286	0.410	15.121	0.788
10	HMGU	Tnfaip1	baseline	-0.291	0.091	286	0.012	15.171	0.414
11	HMGU	Ttll4	baseline	0.878	0.091	282	0.000	19.768	0.028
12	HMGU	Setmar	Elk4	0.983	0.871	12	0.072	20.709	0.114
13	HMGU	Slc38a10	Elk4	0.914	0.842	12	0.087	20.907	0.136
14	HMGU	Tnfaip1	Elk4	0.717	0.875	12	0.177	20.680	0.244
15	HMGU	Ttll4	Elk4	1.886	1.251	8	0.040	10.895	0.046
16	HMGU	Slc38a10	Setmar	-0.069	0.062	12	0.611	15.857	0.847
17	HMGU	Tnfaip1	Setmar	-0.266	0.094	12	0.131	17.690	0.477
18	HMGU	Ttll4	Setmar	0.903	0.081	8	0.002	18.582	0.029
19	HMGU	Tnfaip1	Slc38a10	-0.197	0.066	12	0.177	16.102	0.587
20	HMGU	Ttll4	Slc38a10	0.972	0.038	8	0.000	15.748	0.014
21	HMGU	Ttll4	Tnfaip1	1.169	0.087	8	0.000	18.858	0.007
22	ICS	baseline	Arhgef4	0.181	0.239	405	0.331	20.978	0.635
23	ICS	Elk4	Arhgef4	0.287	0.150	12	0.192	20.296	0.468
24	ICS	Setmar	Arhgef4	0.116	0.116	12	0.536	18.795	0.760
25	ICS	Slc38a10	Arhgef4	0.206	0.109	12	0.265	18.452	0.585
26	ICS	Tnfaip1	Arhgef4	0.151	0.065	13	0.273	15.852	0.674
27	ICS	Ttll4	Arhgef4	0.058	0.062	12	0.673	15.883	0.872
28	ICS	Elk4	baseline	0.105	0.241	405	0.573	21.073	0.782
29	ICS	Setmar	baseline	-0.065	0.240	405	0.727	21.030	0.864
30	ICS	Slc38a10	baseline	0.025	0.240	405	0.892	21.021	0.947
31	ICS	Tnfaip1	baseline	-0.030	0.238	406	0.864	19.723	0.937
32	ICS	Ttll4	baseline	-0.123	0.238	405	0.508	20.962	0.746
33	ICS	Setmar	Elk4	-0.171	0.191	12	0.480	21.728	0.676

34	ICS	Slc38a10	Elk4	-0.080	0.184	12	0.733	21.514	0.843
35	ICS	Tnfaip1	Elk4	-0.135	0.135	13	0.489	19.420	0.724
36	ICS	Ttll4	Elk4	-0.229	0.137	12	0.271	19.765	0.556
37	ICS	Slc38a10	Setmar	0.090	0.150	12	0.670	20.301	0.818
38	ICS	Tnfaip1	Setmar	0.035	0.103	13	0.835	17.903	0.925
39	ICS	Ttll4	Setmar	-0.058	0.103	12	0.741	18.159	0.877
40	ICS	Tnfaip1	Slc38a10	-0.055	0.097	13	0.737	17.570	0.881
41	ICS	Ttll4	Slc38a10	-0.149	0.096	12	0.388	17.796	0.690
42	ICS	Ttll4	Tnfaip1	-0.093	0.053	13	0.449	15.176	0.792
43	MRC_Harwell	baseline	Arhgef4	0.214	0.259	382	0.404	30.818	0.610
44	MRC_Harwell	Elk4	Arhgef4	0.215	0.374	12	0.563	23.758	0.663
45	MRC_Harwell	Setmar	Arhgef4	0.273	0.196	15	0.298	23.840	0.516
46	MRC_Harwell	Slc38a10	Arhgef4	0.142	0.304	20	0.647	28.848	0.753
47	MRC_Harwell	Tnfaip1	Arhgef4	0.057	0.240	15	0.842	25.221	0.896
48	MRC_Harwell	Ttll4	Arhgef4	0.556	0.271	11	0.103	23.000	0.232
49	MRC_Harwell	Elk4	baseline	0.002	0.258	388	0.992	18.651	0.997
50	MRC_Harwell	Setmar	baseline	0.059	0.252	391	0.677	16.910	0.871
51	MRC_Harwell	Slc38a10	baseline	-0.072	0.257	396	0.558	15.583	0.840
52	MRC_Harwell	Tnfaip1	baseline	-0.157	0.254	391	0.270	16.946	0.665
53	MRC_Harwell	Ttll4	baseline	0.342	0.255	387	0.045	19.349	0.365
54	MRC_Harwell	Setmar	Elk4	0.057	0.200	21	0.763	20.001	0.881
55	MRC_Harwell	Slc38a10	Elk4	-0.073	0.282	26	0.729	22.158	0.852
56	MRC_Harwell	Tnfaip1	Elk4	-0.159	0.232	21	0.442	21.183	0.684
57	MRC_Harwell	Ttll4	Elk4	0.340	0.249	17	0.156	22.819	0.403
58	MRC_Harwell	Slc38a10	Setmar	-0.131	0.200	29	0.428	18.211	0.725
59	MRC_Harwell	Tnfaip1	Setmar	-0.216	0.138	24	0.151	16.908	0.554
60	MRC_Harwell	Ttll4	Setmar	0.283	0.134	20	0.090	17.748	0.447
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.085	0.223	29	0.623	18.938	0.820
62	MRC_Harwell	Ttll4	Slc38a10	0.414	0.233	25	0.046	20.981	0.291
63	MRC_Harwell	Ttll4	Tnfaip1	0.499	0.168	20	0.011	19.125	0.196

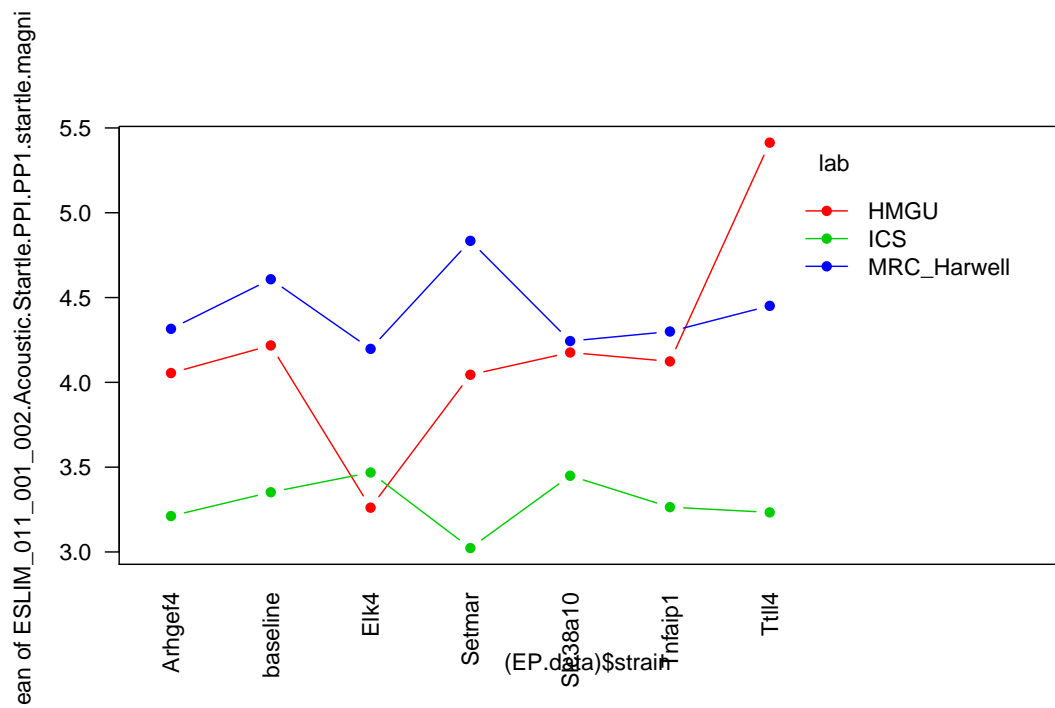


## 29 ESLIM\_\_011\_\_001\_\_002.Acoustic.Startle.PPI.PP1.startle.magnitude count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

## Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	4.054796	0.2307356	10
2	Arhgef4	ICS	3.211732	0.1633182	7
3	Arhgef4	MRC_Harwell	4.315622	1.1376554	4
4	baseline	HMGU	4.217644	0.2794557	281
5	baseline	ICS	3.352196	0.4748949	400
6	baseline	MRC_Harwell	4.607912	0.4777229	381
7	Elk4	HMGU	3.260999	1.5464074	7
8	Elk4	ICS	3.468317	0.5456341	7
9	Elk4	MRC_Harwell	4.197320	0.8153239	10
10	Setmar	HMGU	4.044793	0.2327356	7
11	Setmar	ICS	3.022815	0.4358405	7
12	Setmar	MRC_Harwell	4.834289	0.4848535	13
13	Slc38a10	HMGU	4.176127	0.1833251	7
14	Slc38a10	ICS	3.449321	0.2949502	7
15	Slc38a10	MRC_Harwell	4.243379	0.6263260	18
16	Tnfaip1	HMGU	4.123596	0.1873451	7
17	Tnfaip1	ICS	3.264231	0.3852725	8
18	Tnfaip1	MRC_Harwell	4.299675	0.4546868	13
19	Ttll4	HMGU	5.413383	0.2382678	3
20	Ttll4	ICS	3.233356	0.1913402	7
21	Ttll4	MRC_Harwell	4.451064	0.4256553	9

S2.GxL= 0.1101 S2.GxL/S2.error= 0.54080797

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	4.215	0.703	3.454	0.002	0.839	0.563
lab	2	352.855	176.428	867.563	0.000		
strain:lab	12	11.779	0.982	4.827	0.000		
Residuals	1192	242.405	0.203				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.199	0.046	0.291	0.507
2	Elk4	Arhgef4	-0.216	0.110	0.305	0.493
3	Setmar	Arhgef4	0.121	0.355	0.304	0.697
4	Slc38a10	Arhgef4	0.089	0.485	0.303	0.775
5	Tnfaip1	Arhgef4	0.034	0.794	0.303	0.912
6	Ttll4	Arhgef4	0.433	0.002	0.311	0.189
7	Elk4	baseline	-0.415	0.000	0.287	0.174
8	Setmar	baseline	-0.077	0.378	0.286	0.791
9	Slc38a10	baseline	-0.110	0.173	0.285	0.705
10	Tnfaip1	baseline	-0.165	0.057	0.285	0.574
11	Ttll4	baseline	0.234	0.025	0.294	0.440

12	Setmar	Elk4	0.337	0.008	0.300	0.283
13	Slc38a10	Elk4	0.304	0.013	0.299	0.329
14	Tnfaip1	Elk4	0.250	0.047	0.300	0.421
15	Ttll4	Elk4	0.649	0.000	0.308	0.057
16	Slc38a10	Setmar	-0.033	0.780	0.298	0.914
17	Tnfaip1	Setmar	-0.087	0.473	0.299	0.775
18	Ttll4	Setmar	0.312	0.021	0.307	0.329
19	Tnfaip1	Slc38a10	-0.054	0.641	0.298	0.858
20	Ttll4	Slc38a10	0.345	0.008	0.306	0.282
21	Ttll4	Tnfaip1	0.399	0.003	0.306	0.217

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.163	0.077	289	0.070	12.888	0.739
2	HMGU	Elk4	Arhgef4	-0.794	0.988	15	0.126	26.874	0.252
3	HMGU	Setmar	Arhgef4	-0.010	0.054	15	0.931	13.423	0.984
4	HMGU	Slc38a10	Arhgef4	0.121	0.045	15	0.266	13.205	0.805
5	HMGU	Tnfaip1	Arhgef4	0.069	0.046	15	0.525	13.221	0.888
6	HMGU	Ttll4	Arhgef4	1.359	0.054	11	0.000	14.502	0.015
7	HMGU	Elk4	baseline	-0.957	0.127	286	0.000	14.102	0.070
8	HMGU	Setmar	baseline	-0.173	0.078	286	0.106	13.269	0.725
9	HMGU	Slc38a10	baseline	-0.042	0.077	286	0.696	13.261	0.933
10	HMGU	Tnfaip1	baseline	-0.094	0.077	286	0.377	13.262	0.848
11	HMGU	Ttll4	baseline	1.196	0.078	282	0.000	15.023	0.029
12	HMGU	Setmar	Elk4	0.784	1.223	12	0.210	22.826	0.310
13	HMGU	Slc38a10	Elk4	0.915	1.212	12	0.146	22.865	0.236
14	HMGU	Tnfaip1	Elk4	0.863	1.213	12	0.169	22.863	0.264
15	HMGU	Ttll4	Elk4	2.152	1.808	8	0.049	12.089	0.061
16	HMGU	Slc38a10	Setmar	0.131	0.044	12	0.264	13.362	0.790
17	HMGU	Tnfaip1	Setmar	0.079	0.045	12	0.499	13.385	0.873
18	HMGU	Ttll4	Setmar	1.369	0.055	8	0.000	14.704	0.015
19	HMGU	Tnfaip1	Slc38a10	-0.053	0.034	12	0.606	13.068	0.914
20	HMGU	Ttll4	Slc38a10	1.237	0.039	8	0.000	13.980	0.024
21	HMGU	Ttll4	Tnfaip1	1.290	0.041	8	0.000	14.033	0.020
22	ICS	baseline	Arhgef4	0.140	0.223	405	0.435	15.775	0.783
23	ICS	Elk4	Arhgef4	0.257	0.162	12	0.256	16.837	0.626
24	ICS	Setmar	Arhgef4	-0.189	0.108	12	0.304	15.308	0.711
25	ICS	Slc38a10	Arhgef4	0.238	0.057	12	0.087	13.760	0.633
26	ICS	Tnfaip1	Arhgef4	0.052	0.092	13	0.744	14.673	0.917
27	ICS	Ttll4	Arhgef4	0.022	0.032	12	0.824	12.984	0.965
28	ICS	Elk4	baseline	0.116	0.227	405	0.523	15.848	0.820
29	ICS	Setmar	baseline	-0.329	0.225	405	0.069	15.819	0.522
30	ICS	Slc38a10	baseline	0.097	0.223	405	0.590	15.791	0.849
31	ICS	Tnfaip1	baseline	-0.088	0.224	406	0.603	15.310	0.862
32	ICS	Ttll4	baseline	-0.119	0.223	405	0.509	15.778	0.816
33	ICS	Setmar	Elk4	-0.446	0.244	12	0.117	18.902	0.418

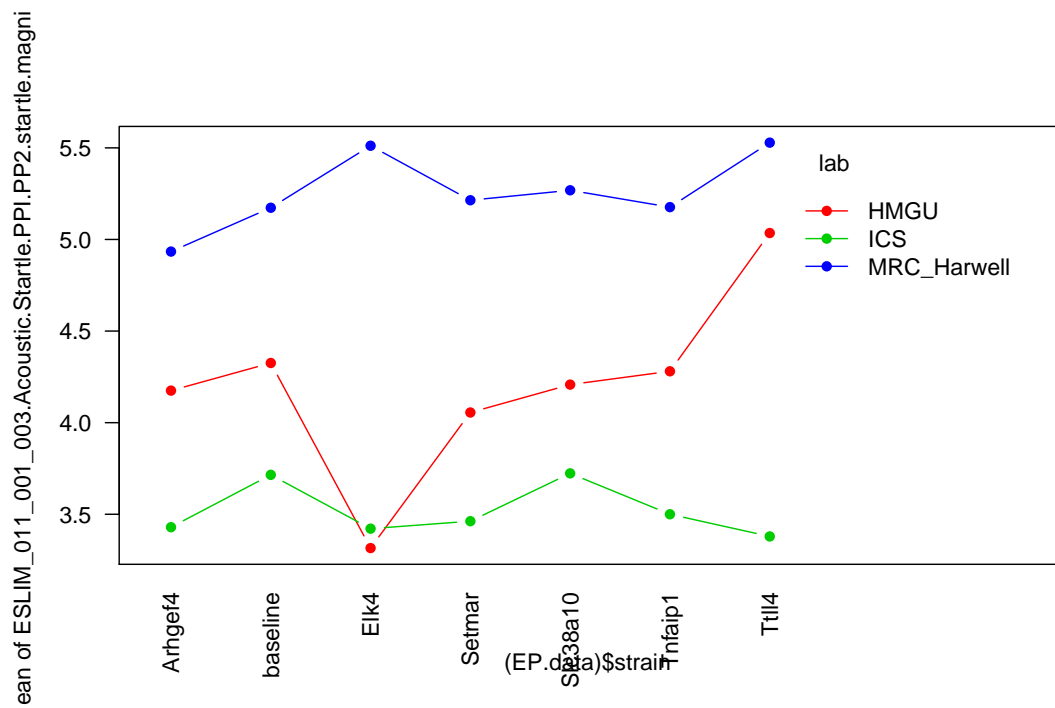
34	ICS	Slc38a10	Elk4	-0.019	0.192	12	0.937	17.639	0.972
35	ICS	Tnfaip1	Elk4	-0.204	0.217	13	0.413	18.021	0.703
36	ICS	Ttll4	Elk4	-0.235	0.167	12	0.303	16.972	0.656
37	ICS	Slc38a10	Setmar	0.427	0.138	12	0.053	16.177	0.415
38	ICS	Tnfaip1	Setmar	0.241	0.168	13	0.275	16.749	0.645
39	ICS	Ttll4	Setmar	0.211	0.113	12	0.265	15.453	0.681
40	ICS	Tnfaip1	Slc38a10	-0.185	0.120	13	0.321	15.457	0.718
41	ICS	Ttll4	Slc38a10	-0.216	0.062	12	0.130	13.912	0.665
42	ICS	Ttll4	Tnfaip1	-0.031	0.097	13	0.851	14.804	0.951
43	MRC_Harwell	baseline	Arhgef4	0.292	0.237	383	0.233	19.353	0.587
44	MRC_Harwell	Elk4	Arhgef4	-0.118	0.822	12	0.829	23.583	0.870
45	MRC_Harwell	Setmar	Arhgef4	0.519	0.447	15	0.195	24.558	0.400
46	MRC_Harwell	Slc38a10	Arhgef4	-0.072	0.528	20	0.859	27.241	0.908
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.016	0.424	15	0.966	24.197	0.979
48	MRC_Harwell	Ttll4	Arhgef4	0.135	0.485	11	0.752	22.885	0.831
49	MRC_Harwell	Elk4	baseline	-0.411	0.238	389	0.009	14.808	0.420
50	MRC_Harwell	Setmar	baseline	0.226	0.228	392	0.094	14.059	0.650
51	MRC_Harwell	Slc38a10	baseline	-0.365	0.235	397	0.002	13.536	0.464
52	MRC_Harwell	Tnfaip1	baseline	-0.308	0.228	392	0.022	14.051	0.538
53	MRC_Harwell	Ttll4	baseline	-0.157	0.227	388	0.330	14.976	0.756
54	MRC_Harwell	Setmar	Elk4	0.637	0.419	21	0.029	20.140	0.254
55	MRC_Harwell	Slc38a10	Elk4	0.046	0.487	26	0.868	20.547	0.933
56	MRC_Harwell	Tnfaip1	Elk4	0.102	0.403	21	0.705	19.841	0.852
57	MRC_Harwell	Ttll4	Elk4	0.254	0.437	17	0.415	21.501	0.654
58	MRC_Harwell	Slc38a10	Setmar	-0.591	0.327	29	0.008	16.919	0.266
59	MRC_Harwell	Tnfaip1	Setmar	-0.535	0.221	24	0.008	15.802	0.305
60	MRC_Harwell	Ttll4	Setmar	-0.383	0.214	20	0.070	16.447	0.463
61	MRC_Harwell	Tnfaip1	Slc38a10	0.056	0.316	29	0.785	16.738	0.914
62	MRC_Harwell	Ttll4	Slc38a10	0.208	0.325	25	0.381	18.099	0.696
63	MRC_Harwell	Ttll4	Tnfaip1	0.151	0.197	20	0.440	16.093	0.769

### 30 ESLIM\_011\_001\_003.Acoustic.Startle.PPI.PP2.startle.magnitude count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

### Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	4.174928	0.2032745	10
2	Arhgef4	ICS	3.429448	0.2222396	7
3	Arhgef4	MRC_Harwell	4.933893	0.4381066	4
4	baseline	HMGU	4.325745	0.2969710	281
5	baseline	ICS	3.715245	0.4374114	400
6	baseline	MRC_Harwell	5.173051	0.3926857	381
7	Elk4	HMGU	3.315422	1.5738589	7
8	Elk4	ICS	3.421485	0.5886864	7
9	Elk4	MRC_Harwell	5.511519	0.2594676	10
10	Setmar	HMGU	4.055499	0.2140450	7
11	Setmar	ICS	3.462200	0.4197840	7
12	Setmar	MRC_Harwell	5.214137	0.1992981	13
13	Slc38a10	HMGU	4.207782	0.2398068	7
14	Slc38a10	ICS	3.723244	0.1674968	7
15	Slc38a10	MRC_Harwell	5.268389	0.4773311	18
16	Tnfaip1	HMGU	4.280482	0.2134072	7
17	Tnfaip1	ICS	3.499986	0.3035226	8
18	Tnfaip1	MRC_Harwell	5.176458	0.4711424	13
19	Ttll4	HMGU	5.035117	0.3411534	3
20	Ttll4	ICS	3.379041	0.2044097	7
21	Ttll4	MRC_Harwell	5.528457	0.2904251	9

S2.GxL= 0.07478 S2.GxL/S2.error= 0.47042172

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	7.053	1.176	7.400	0.000	0.841	0.562
lab	2	501.071	250.535	1577.111	0.000		
strain:lab	12	11.181	0.932	5.865	0.000		
Residuals	1192	189.358	0.159				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.213	0.015	0.242	0.395
2	Elk4	Arhgef4	-0.096	0.420	0.255	0.713
3	Setmar	Arhgef4	0.055	0.638	0.254	0.833
4	Slc38a10	Arhgef4	0.206	0.066	0.253	0.432
5	Tnfaip1	Arhgef4	0.125	0.277	0.254	0.631
6	Ttll4	Arhgef4	0.412	0.001	0.261	0.141
7	Elk4	baseline	-0.309	0.000	0.238	0.219
8	Setmar	baseline	-0.159	0.041	0.237	0.516
9	Slc38a10	baseline	-0.008	0.916	0.236	0.975
10	Tnfaip1	baseline	-0.088	0.247	0.237	0.715
11	Ttll4	baseline	0.198	0.032	0.244	0.433



12	Setmar	Elk4	0.151	0.178	0.251	0.559
13	Slc38a10	Elk4	0.302	0.005	0.250	0.251
14	Tnfaip1	Elk4	0.221	0.046	0.250	0.395
15	Ttll4	Elk4	0.508	0.000	0.258	0.072
16	Slc38a10	Setmar	0.151	0.147	0.249	0.555
17	Tnfaip1	Setmar	0.070	0.513	0.249	0.783
18	Ttll4	Setmar	0.357	0.003	0.257	0.190
19	Tnfaip1	Slc38a10	-0.081	0.433	0.248	0.751
20	Ttll4	Slc38a10	0.206	0.075	0.256	0.437
21	Ttll4	Tnfaip1	0.287	0.016	0.256	0.285

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.151	0.087	289	0.113	13.483	0.711
2	HMGU	Elk4	Arhgef4	-0.860	1.016	15	0.104	26.519	0.184
3	HMGU	Setmar	Arhgef4	-0.119	0.043	15	0.261	13.685	0.770
4	HMGU	Slc38a10	Arhgef4	0.033	0.048	15	0.765	13.868	0.936
5	HMGU	Tnfaip1	Arhgef4	0.106	0.043	15	0.318	13.681	0.796
6	HMGU	Ttll4	Arhgef4	0.860	0.055	11	0.000	15.692	0.056
7	HMGU	Elk4	baseline	-1.010	0.138	286	0.000	15.457	0.027
8	HMGU	Setmar	baseline	-0.270	0.087	286	0.017	14.134	0.513
9	HMGU	Slc38a10	baseline	-0.118	0.088	286	0.298	14.141	0.774
10	HMGU	Tnfaip1	baseline	-0.045	0.087	286	0.689	14.134	0.912
11	HMGU	Ttll4	baseline	0.709	0.088	282	0.000	17.225	0.112
12	HMGU	Setmar	Elk4	0.740	1.261	12	0.241	20.497	0.312
13	HMGU	Slc38a10	Elk4	0.892	1.267	12	0.164	20.469	0.226
14	HMGU	Tnfaip1	Elk4	0.965	1.261	12	0.134	20.497	0.191
15	HMGU	Ttll4	Elk4	1.720	1.887	8	0.107	10.688	0.122
16	HMGU	Slc38a10	Setmar	0.152	0.052	12	0.234	14.346	0.713
17	HMGU	Tnfaip1	Setmar	0.225	0.046	12	0.072	14.078	0.586
18	HMGU	Ttll4	Setmar	0.980	0.063	8	0.000	16.338	0.034
19	HMGU	Tnfaip1	Slc38a10	0.073	0.052	12	0.560	14.340	0.860
20	HMGU	Ttll4	Slc38a10	0.827	0.072	8	0.002	16.819	0.071
21	HMGU	Ttll4	Tnfaip1	0.755	0.063	8	0.002	16.327	0.094
22	ICS	baseline	Arhgef4	0.286	0.189	405	0.086	16.803	0.506
23	ICS	Elk4	Arhgef4	-0.008	0.198	12	0.974	19.941	0.986
24	ICS	Setmar	Arhgef4	0.033	0.113	12	0.858	16.942	0.940
25	ICS	Slc38a10	Arhgef4	0.294	0.039	12	0.016	13.766	0.476
26	ICS	Tnfaip1	Arhgef4	0.071	0.072	13	0.621	15.080	0.866
27	ICS	Ttll4	Arhgef4	-0.050	0.046	12	0.667	14.074	0.902
28	ICS	Elk4	baseline	-0.294	0.194	405	0.081	16.923	0.495
29	ICS	Setmar	baseline	-0.253	0.191	405	0.130	16.854	0.556
30	ICS	Slc38a10	baseline	0.008	0.189	405	0.962	16.794	0.985
31	ICS	Tnfaip1	baseline	-0.215	0.190	406	0.167	16.180	0.613
32	ICS	Ttll4	baseline	-0.336	0.189	405	0.043	16.799	0.435
33	ICS	Setmar	Elk4	0.041	0.261	12	0.884	21.592	0.932

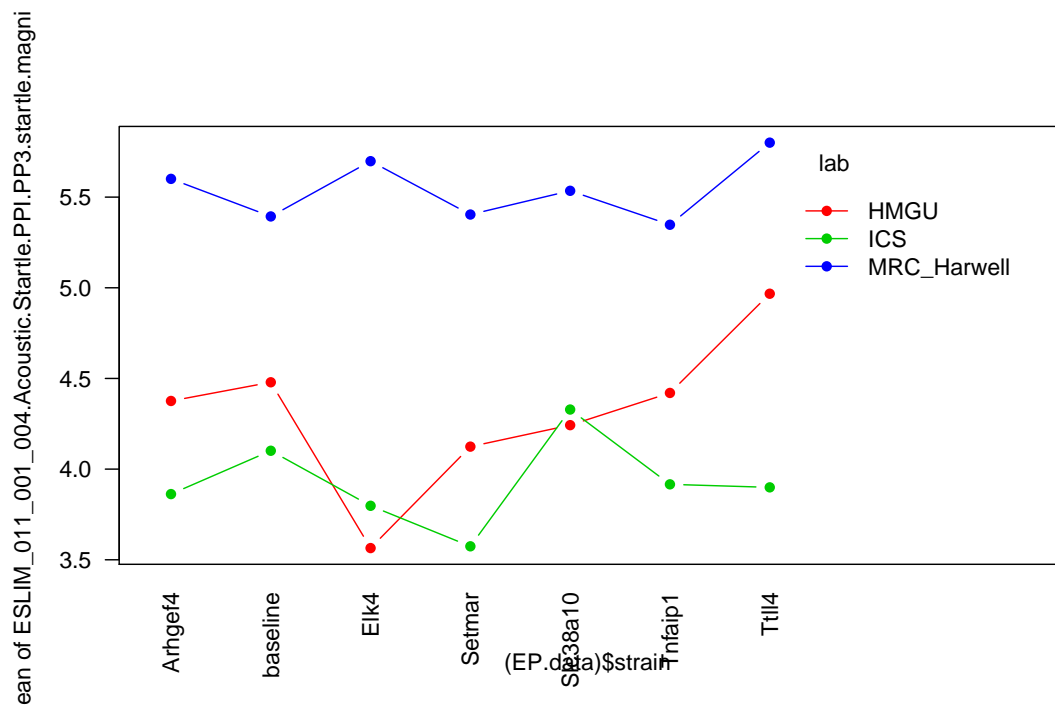
34	ICS	Slc38a10	Elk4	0.302	0.187	12	0.217	19.613	0.511
35	ICS	Tnfaip1	Elk4	0.079	0.210	13	0.746	20.086	0.864
36	ICS	Ttll4	Elk4	-0.042	0.194	12	0.860	19.825	0.926
37	ICS	Slc38a10	Setmar	0.261	0.102	12	0.152	16.511	0.545
38	ICS	Tnfaip1	Setmar	0.038	0.131	13	0.843	17.404	0.931
39	ICS	Ttll4	Setmar	-0.083	0.109	12	0.646	16.790	0.847
40	ICS	Tnfaip1	Slc38a10	-0.223	0.063	13	0.108	14.669	0.592
41	ICS	Ttll4	Slc38a10	-0.344	0.035	12	0.005	13.594	0.404
42	ICS	Ttll4	Tnfaip1	-0.121	0.069	13	0.389	14.934	0.772
43	MRC_Harwell	baseline	Arhgef4	0.239	0.154	383	0.227	19.039	0.588
44	MRC_Harwell	Elk4	Arhgef4	0.578	0.098	12	0.009	17.252	0.196
45	MRC_Harwell	Setmar	Arhgef4	0.280	0.070	15	0.084	15.668	0.510
46	MRC_Harwell	Slc38a10	Arhgef4	0.334	0.222	20	0.214	22.587	0.481
47	MRC_Harwell	Tnfaip1	Arhgef4	0.243	0.216	15	0.376	22.069	0.610
48	MRC_Harwell	Ttll4	Arhgef4	0.595	0.114	11	0.014	18.011	0.190
49	MRC_Harwell	Elk4	baseline	0.338	0.152	389	0.007	14.632	0.418
50	MRC_Harwell	Setmar	baseline	0.041	0.151	392	0.708	13.998	0.920
51	MRC_Harwell	Slc38a10	baseline	0.095	0.157	397	0.320	13.512	0.814
52	MRC_Harwell	Tnfaip1	baseline	0.003	0.156	392	0.976	14.075	0.993
53	MRC_Harwell	Ttll4	baseline	0.355	0.153	388	0.007	14.944	0.398
54	MRC_Harwell	Setmar	Elk4	-0.297	0.052	21	0.005	13.479	0.468
55	MRC_Harwell	Slc38a10	Elk4	-0.243	0.172	26	0.150	16.442	0.570
56	MRC_Harwell	Tnfaip1	Elk4	-0.335	0.156	21	0.056	16.507	0.437
57	MRC_Harwell	Ttll4	Elk4	0.017	0.075	17	0.895	14.571	0.967
58	MRC_Harwell	Slc38a10	Setmar	0.054	0.150	29	0.703	15.289	0.897
59	MRC_Harwell	Tnfaip1	Setmar	-0.038	0.131	24	0.793	15.309	0.928
60	MRC_Harwell	Ttll4	Setmar	0.314	0.058	20	0.007	13.757	0.446
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.092	0.225	29	0.599	16.990	0.831
62	MRC_Harwell	Ttll4	Slc38a10	0.260	0.182	25	0.148	17.023	0.548
63	MRC_Harwell	Ttll4	Tnfaip1	0.352	0.167	20	0.061	17.113	0.419

### 31 ESLIM\_011\_001\_004.Acoustic.Startle.PPI.PP3.startle.magnitude count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

### Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	4.375785	0.1962017	10
2	Arhgef4	ICS	3.862282	0.5428625	7
3	Arhgef4	MRC_Harwell	5.600612	0.2756667	4
4	baseline	HMGU	4.478895	0.3318984	281
5	baseline	ICS	4.101210	0.5515398	400
6	baseline	MRC_Harwell	5.393446	0.4421283	381
7	Elk4	HMGU	3.564492	1.7611533	7
8	Elk4	ICS	3.797693	0.5213679	7
9	Elk4	MRC_Harwell	5.698136	0.4861054	10
10	Setmar	HMGU	4.124018	0.2964780	7
11	Setmar	ICS	3.574251	0.5271615	7
12	Setmar	MRC_Harwell	5.403979	0.2649437	13
13	Slc38a10	HMGU	4.242414	0.1919296	7
14	Slc38a10	ICS	4.328620	0.5159003	7
15	Slc38a10	MRC_Harwell	5.534791	0.4657414	18
16	Tnfaip1	HMGU	4.420060	0.3049835	7
17	Tnfaip1	ICS	3.916058	0.4884215	8
18	Tnfaip1	MRC_Harwell	5.347644	0.4065816	13
19	Ttll4	HMGU	4.967172	0.4112684	3
20	Ttll4	ICS	3.899352	0.1978944	7
21	Ttll4	MRC_Harwell	5.800429	0.3163342	9

S2.GxL= 0.04511 S2.GxL/S2.error= 0.20254512

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	6.801	1.133	5.092	0.000	1.160	0.388
lab	2	415.231	207.616	932.690	0.000		
strain:lab	12	10.322	0.860	3.864	0.000		
Residuals	1192	265.338	0.223				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.048	0.644	0.204	0.818
2	Elk4	Arhgef4	-0.237	0.093	0.226	0.315
3	Setmar	Arhgef4	-0.234	0.089	0.225	0.318
4	Slc38a10	Arhgef4	0.083	0.530	0.223	0.716
5	Tnfaip1	Arhgef4	-0.058	0.669	0.224	0.799
6	Ttll4	Arhgef4	0.232	0.120	0.234	0.341
7	Elk4	baseline	-0.285	0.003	0.199	0.178
8	Setmar	baseline	-0.282	0.002	0.198	0.179
9	Slc38a10	baseline	0.035	0.678	0.196	0.861
10	Tnfaip1	baseline	-0.106	0.240	0.197	0.599
11	Ttll4	baseline	0.184	0.092	0.208	0.394

12	Setmar	Elk4	0.003	0.980	0.220	0.988
13	Slc38a10	Elk4	0.320	0.012	0.218	0.167
14	Tnfaip1	Elk4	0.179	0.173	0.219	0.429
15	Ttll4	Elk4	0.470	0.001	0.229	0.063
16	Slc38a10	Setmar	0.317	0.010	0.216	0.168
17	Tnfaip1	Setmar	0.176	0.168	0.217	0.434
18	Ttll4	Setmar	0.466	0.001	0.228	0.063
19	Tnfaip1	Slc38a10	-0.141	0.247	0.215	0.524
20	Ttll4	Slc38a10	0.149	0.275	0.226	0.522
21	Ttll4	Tnfaip1	0.291	0.038	0.227	0.224

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.103	0.108	289	0.330	15.148	0.751
2	HMGU	Elk4	Arhgef4	-0.811	1.264	15	0.164	22.666	0.211
3	HMGU	Setmar	Arhgef4	-0.252	0.058	15	0.051	15.749	0.447
4	HMGU	Slc38a10	Arhgef4	-0.133	0.038	15	0.184	14.449	0.679
5	HMGU	Tnfaip1	Arhgef4	0.044	0.060	15	0.720	15.878	0.893
6	HMGU	Ttll4	Arhgef4	0.591	0.062	11	0.004	18.450	0.101
7	HMGU	Elk4	baseline	-0.914	0.173	286	0.000	19.615	0.014
8	HMGU	Setmar	baseline	-0.355	0.110	286	0.005	16.631	0.292
9	HMGU	Slc38a10	baseline	-0.236	0.109	286	0.062	16.582	0.478
10	HMGU	Tnfaip1	baseline	-0.059	0.110	286	0.643	16.636	0.859
11	HMGU	Ttll4	baseline	0.488	0.111	282	0.012	23.784	0.184
12	HMGU	Setmar	Elk4	0.560	1.595	12	0.423	16.573	0.459
13	HMGU	Slc38a10	Elk4	0.678	1.569	12	0.331	16.641	0.369
14	HMGU	Tnfaip1	Elk4	0.856	1.597	12	0.229	16.566	0.264
15	HMGU	Ttll4	Elk4	1.403	2.369	8	0.223	9.291	0.235
16	HMGU	Slc38a10	Setmar	0.118	0.062	12	0.393	16.563	0.723
17	HMGU	Tnfaip1	Setmar	0.296	0.090	12	0.090	18.354	0.396
18	HMGU	Ttll4	Setmar	0.843	0.108	8	0.006	19.890	0.037
19	HMGU	Tnfaip1	Slc38a10	0.178	0.065	12	0.217	16.735	0.597
20	HMGU	Ttll4	Slc38a10	0.725	0.070	8	0.004	18.676	0.053
21	HMGU	Ttll4	Tnfaip1	0.547	0.112	8	0.045	19.933	0.164
22	ICS	baseline	Arhgef4	0.239	0.304	405	0.256	26.450	0.520
23	ICS	Elk4	Arhgef4	-0.065	0.283	12	0.824	23.930	0.877
24	ICS	Setmar	Arhgef4	-0.288	0.286	12	0.334	23.943	0.494
25	ICS	Slc38a10	Arhgef4	0.466	0.280	12	0.125	23.916	0.270
26	ICS	Tnfaip1	Arhgef4	0.054	0.264	13	0.843	24.373	0.895
27	ICS	Ttll4	Arhgef4	0.037	0.167	12	0.868	21.917	0.921
28	ICS	Elk4	baseline	-0.304	0.304	405	0.149	26.431	0.415
29	ICS	Setmar	baseline	-0.527	0.304	405	0.013	26.436	0.162
30	ICS	Slc38a10	baseline	0.227	0.304	405	0.280	26.426	0.540
31	ICS	Tnfaip1	baseline	-0.185	0.303	406	0.347	24.349	0.611
32	ICS	Ttll4	baseline	-0.202	0.300	405	0.335	26.238	0.586
33	ICS	Setmar	Elk4	-0.223	0.275	12	0.441	23.886	0.592

34	ICS	Slc38a10	Elk4	0.531	0.269	12	0.080	23.847	0.206
35	ICS	Tnfaip1	Elk4	0.118	0.254	13	0.657	24.211	0.769
36	ICS	Ttll4	Elk4	0.102	0.155	12	0.638	21.512	0.784
37	ICS	Slc38a10	Setmar	0.754	0.272	12	0.019	23.868	0.078
38	ICS	Tnfaip1	Setmar	0.342	0.257	13	0.215	24.256	0.400
39	ICS	Ttll4	Setmar	0.325	0.159	12	0.153	21.624	0.387
40	ICS	Tnfaip1	Slc38a10	-0.413	0.251	13	0.136	24.168	0.309
41	ICS	Ttll4	Slc38a10	-0.429	0.153	12	0.062	21.405	0.254
42	ICS	Ttll4	Tnfaip1	-0.017	0.147	13	0.934	21.037	0.963
43	MRC_Harwell	baseline	Arhgef4	-0.207	0.195	383	0.351	28.372	0.583
44	MRC_Harwell	Elk4	Arhgef4	0.098	0.196	12	0.716	23.567	0.809
45	MRC_Harwell	Setmar	Arhgef4	-0.197	0.071	15	0.217	18.043	0.567
46	MRC_Harwell	Slc38a10	Arhgef4	-0.066	0.196	20	0.791	26.262	0.866
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.253	0.147	15	0.267	22.997	0.503
48	MRC_Harwell	Ttll4	Arhgef4	0.200	0.094	11	0.300	19.659	0.577
49	MRC_Harwell	Elk4	baseline	0.305	0.196	389	0.032	17.934	0.371
50	MRC_Harwell	Setmar	baseline	0.011	0.192	392	0.932	16.384	0.975
51	MRC_Harwell	Slc38a10	baseline	0.141	0.196	397	0.187	15.225	0.664
52	MRC_Harwell	Tnfaip1	baseline	-0.046	0.195	392	0.713	16.455	0.890
53	MRC_Harwell	Ttll4	baseline	0.407	0.194	388	0.006	18.535	0.240
54	MRC_Harwell	Setmar	Elk4	-0.294	0.141	21	0.077	18.753	0.397
55	MRC_Harwell	Slc38a10	Elk4	-0.163	0.224	26	0.389	21.559	0.649
56	MRC_Harwell	Tnfaip1	Elk4	-0.350	0.196	21	0.074	21.196	0.332
57	MRC_Harwell	Ttll4	Elk4	0.102	0.172	17	0.599	21.190	0.776
58	MRC_Harwell	Slc38a10	Setmar	0.131	0.156	29	0.371	17.750	0.699
59	MRC_Harwell	Tnfaip1	Setmar	-0.056	0.118	24	0.679	16.961	0.866
60	MRC_Harwell	Ttll4	Setmar	0.396	0.082	20	0.005	16.176	0.240
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.187	0.196	29	0.254	19.226	0.589
62	MRC_Harwell	Ttll4	Slc38a10	0.266	0.180	25	0.137	20.213	0.452
63	MRC_Harwell	Ttll4	Tnfaip1	0.453	0.139	20	0.011	19.014	0.200

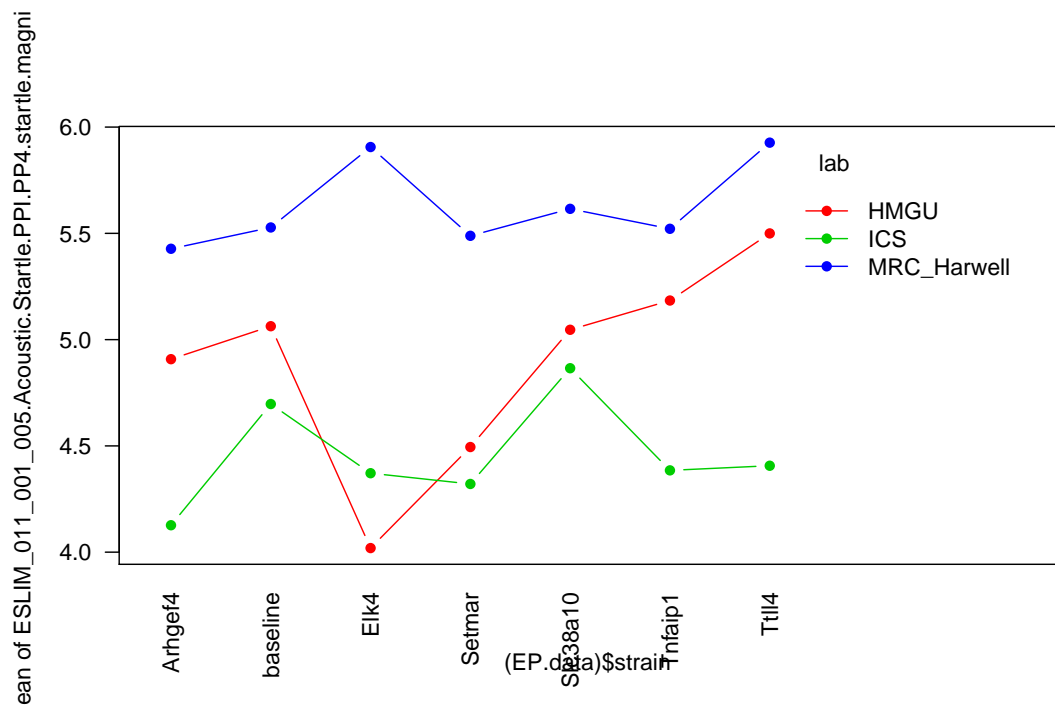
## 32 ESLIM\_011\_001\_005.Acoustic.Startle.PPI.PP4.startle.magnitude count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

## Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	4.908009	0.2966140	10
2	Arhgef4	ICS	4.126689	0.8274017	7
3	Arhgef4	MRC_Harwell	5.427443	0.1854216	4
4	baseline	HMGU	5.063068	0.4860596	281
5	baseline	ICS	4.696988	0.6256248	400
6	baseline	MRC_Harwell	5.527695	0.4609684	381
7	Elk4	HMGU	4.019185	2.0606579	7
8	Elk4	ICS	4.371422	0.6010360	7
9	Elk4	MRC_Harwell	5.906150	0.3218459	10
10	Setmar	HMGU	4.494655	0.2476255	7
11	Setmar	ICS	4.320881	0.4823411	7
12	Setmar	MRC_Harwell	5.488443	0.2570919	13
13	Slc38a10	HMGU	5.046380	0.3508773	7
14	Slc38a10	ICS	4.865437	0.4402928	7
15	Slc38a10	MRC_Harwell	5.615330	0.5537166	18
16	Tnfaip1	HMGU	5.183998	0.2991307	7
17	Tnfaip1	ICS	4.384849	0.4331230	8
18	Tnfaip1	MRC_Harwell	5.521465	0.4377346	13
19	Ttll4	HMGU	5.499698	0.6798932	3
20	Ttll4	ICS	4.406634	0.3627686	7
21	Ttll4	MRC_Harwell	5.926813	0.4204757	9

S2.GxL= 0.06328 S2.GxL/S2.error= 0.21323186

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	6.621	1.104	3.720	0.001	1.058	0.438
lab	2	171.362	85.681	288.835	0.000		
strain:lab	12	13.131	1.094	3.689	0.000		
Residuals	1192	353.598	0.297				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.266	0.027	0.241	0.290
2	Elk4	Arhgef4	-0.040	0.804	0.265	0.881
3	Setmar	Arhgef4	-0.053	0.737	0.263	0.843
4	Slc38a10	Arhgef4	0.330	0.031	0.262	0.231
5	Tnfaip1	Arhgef4	0.191	0.226	0.262	0.482
6	Ttll4	Arhgef4	0.409	0.018	0.275	0.162
7	Elk4	baseline	-0.307	0.006	0.235	0.216
8	Setmar	baseline	-0.320	0.003	0.233	0.195
9	Slc38a10	baseline	0.064	0.514	0.231	0.787
10	Tnfaip1	baseline	-0.076	0.467	0.232	0.749
11	Ttll4	baseline	0.142	0.259	0.245	0.572

12	Setmar	Elk4	-0.013	0.933	0.258	0.961
13	Slc38a10	Elk4	0.371	0.012	0.256	0.173
14	Tnfaip1	Elk4	0.231	0.128	0.257	0.386
15	Ttll4	Elk4	0.449	0.007	0.269	0.121
16	Slc38a10	Setmar	0.383	0.007	0.254	0.157
17	Tnfaip1	Setmar	0.244	0.097	0.255	0.358
18	Ttll4	Setmar	0.462	0.005	0.267	0.109
19	Tnfaip1	Slc38a10	-0.140	0.322	0.253	0.591
20	Ttll4	Slc38a10	0.079	0.619	0.265	0.772
21	Ttll4	Tnfaip1	0.218	0.178	0.266	0.428

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.155	0.232	289	0.318	16.955	0.694
2	HMGU	Elk4	Arhgef4	-0.889	1.751	15	0.193	22.738	0.244
3	HMGU	Setmar	Arhgef4	-0.413	0.077	15	0.009	15.551	0.295
4	HMGU	Slc38a10	Arhgef4	0.138	0.102	15	0.393	16.648	0.727
5	HMGU	Tnfaip1	Arhgef4	0.276	0.089	15	0.079	16.055	0.484
6	HMGU	Ttll4	Arhgef4	0.592	0.156	11	0.044	21.540	0.193
7	HMGU	Elk4	baseline	-1.044	0.320	286	0.000	22.415	0.020
8	HMGU	Setmar	baseline	-0.568	0.233	286	0.002	19.268	0.172
9	HMGU	Slc38a10	baseline	-0.017	0.234	286	0.928	19.313	0.967
10	HMGU	Tnfaip1	baseline	0.121	0.233	286	0.513	19.288	0.766
11	HMGU	Ttll4	baseline	0.437	0.238	282	0.124	31.469	0.344
12	HMGU	Setmar	Elk4	0.475	2.154	12	0.556	16.736	0.588
13	HMGU	Slc38a10	Elk4	1.027	2.185	12	0.218	16.674	0.252
14	HMGU	Tnfaip1	Elk4	1.165	2.168	12	0.165	16.707	0.195
15	HMGU	Ttll4	Elk4	1.481	3.300	8	0.272	9.300	0.284
16	HMGU	Slc38a10	Setmar	0.552	0.092	12	0.005	16.789	0.177
17	HMGU	Tnfaip1	Setmar	0.689	0.075	12	0.001	15.970	0.092
18	HMGU	Ttll4	Setmar	1.005	0.162	8	0.007	19.960	0.038
19	HMGU	Tnfaip1	Slc38a10	0.138	0.106	12	0.445	17.446	0.732
20	HMGU	Ttll4	Slc38a10	0.453	0.208	8	0.188	19.875	0.351
21	HMGU	Ttll4	Tnfaip1	0.316	0.183	8	0.316	19.996	0.502
22	ICS	baseline	Arhgef4	0.570	0.396	405	0.018	25.233	0.196
23	ICS	Elk4	Arhgef4	0.245	0.523	12	0.539	23.837	0.646
24	ICS	Setmar	Arhgef4	0.194	0.459	12	0.601	23.993	0.705
25	ICS	Slc38a10	Arhgef4	0.739	0.439	12	0.059	24.000	0.154
26	ICS	Tnfaip1	Arhgef4	0.258	0.417	13	0.454	24.740	0.602
27	ICS	Ttll4	Arhgef4	0.280	0.408	12	0.428	23.960	0.576
28	ICS	Elk4	baseline	-0.326	0.391	405	0.173	25.046	0.454
29	ICS	Setmar	baseline	-0.376	0.389	405	0.115	24.972	0.388
30	ICS	Slc38a10	baseline	0.168	0.388	405	0.479	24.950	0.697
31	ICS	Tnfaip1	baseline	-0.312	0.388	406	0.161	23.107	0.464
32	ICS	Ttll4	baseline	-0.290	0.388	405	0.222	24.914	0.503
33	ICS	Setmar	Elk4	-0.051	0.297	12	0.865	23.100	0.913

34	ICS	Slc38a10	Elk4	0.494	0.278	12	0.105	22.798	0.288
35	ICS	Tnfaip1	Elk4	0.013	0.268	13	0.961	22.719	0.976
36	ICS	Ttll4	Elk4	0.035	0.246	12	0.897	22.196	0.937
37	ICS	Slc38a10	Setmar	0.545	0.213	12	0.048	21.380	0.222
38	ICS	Tnfaip1	Setmar	0.064	0.208	13	0.791	21.126	0.882
39	ICS	Ttll4	Setmar	0.086	0.182	12	0.714	20.441	0.841
40	ICS	Tnfaip1	Slc38a10	-0.481	0.190	13	0.053	20.544	0.267
41	ICS	Ttll4	Slc38a10	-0.459	0.163	12	0.055	19.768	0.283
42	ICS	Ttll4	Tnfaip1	0.022	0.162	13	0.918	19.512	0.958
43	MRC_Harwell	baseline	Arhgef4	0.100	0.211	383	0.664	24.109	0.815
44	MRC_Harwell	Elk4	Arhgef4	0.479	0.086	12	0.017	17.418	0.243
45	MRC_Harwell	Setmar	Arhgef4	0.061	0.060	15	0.669	15.691	0.875
46	MRC_Harwell	Slc38a10	Arhgef4	0.188	0.266	20	0.517	25.934	0.684
47	MRC_Harwell	Tnfaip1	Arhgef4	0.094	0.160	15	0.687	21.095	0.826
48	MRC_Harwell	Ttll4	Arhgef4	0.499	0.138	11	0.047	19.937	0.248
49	MRC_Harwell	Elk4	baseline	0.378	0.210	389	0.010	16.419	0.340
50	MRC_Harwell	Setmar	baseline	-0.039	0.208	392	0.760	15.335	0.919
51	MRC_Harwell	Slc38a10	baseline	0.088	0.217	397	0.435	14.503	0.818
52	MRC_Harwell	Tnfaip1	baseline	-0.006	0.212	392	0.962	15.400	0.987
53	MRC_Harwell	Ttll4	baseline	0.399	0.212	388	0.010	16.983	0.318
54	MRC_Harwell	Setmar	Elk4	-0.418	0.082	21	0.002	14.803	0.284
55	MRC_Harwell	Slc38a10	Elk4	-0.291	0.236	26	0.141	19.235	0.480
56	MRC_Harwell	Tnfaip1	Elk4	-0.385	0.154	21	0.030	17.262	0.340
57	MRC_Harwell	Ttll4	Elk4	0.021	0.138	17	0.905	17.507	0.959
58	MRC_Harwell	Slc38a10	Setmar	0.127	0.207	29	0.450	17.427	0.750
59	MRC_Harwell	Tnfaip1	Setmar	0.033	0.129	24	0.817	15.859	0.932
60	MRC_Harwell	Ttll4	Setmar	0.438	0.110	20	0.006	16.000	0.270
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.094	0.259	29	0.616	18.817	0.817
62	MRC_Harwell	Ttll4	Slc38a10	0.311	0.265	25	0.151	20.633	0.459
63	MRC_Harwell	Ttll4	Tnfaip1	0.405	0.186	20	0.042	18.681	0.326

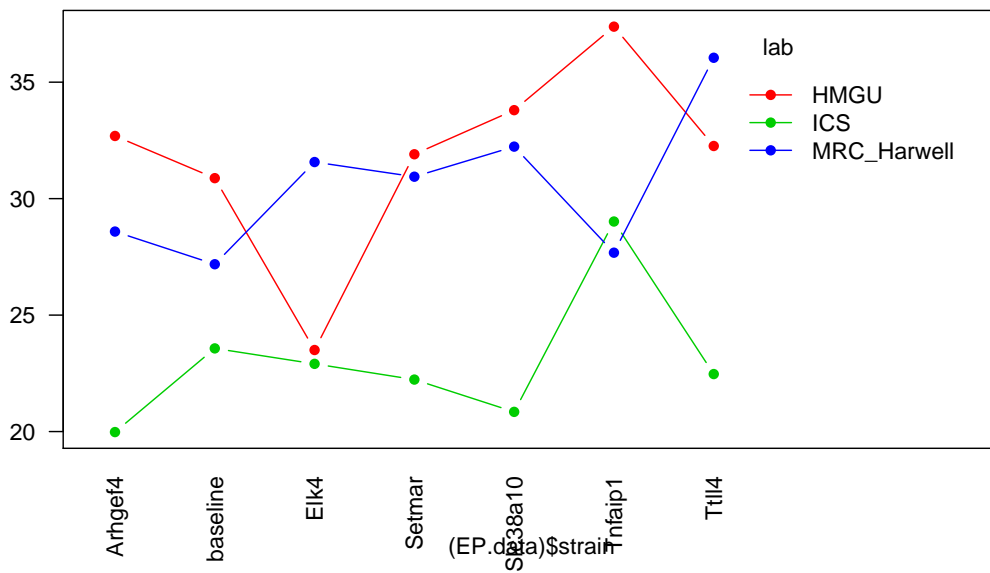
### 33 ESLIM\_011\_001\_006.Acoustic.Startle.PPI.110dB.startle.magnitude count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

### Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

an of ESLIM\_011\_001\_006.Acoustic.Startle.PPI.110dB.startle.magr



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	32.69051	5.072880	10
2	Arhgef4	ICS	19.97780	4.724274	7
3	Arhgef4	MRC_Harwell	28.58691	1.648620	4
4	baseline	HMGU	30.87940	6.169433	281
5	baseline	ICS	23.57073	6.118637	400
6	baseline	MRC_Harwell	27.18399	5.944608	381
7	Elk4	HMGU	23.50094	14.982439	7
8	Elk4	ICS	22.90703	4.422984	7
9	Elk4	MRC_Harwell	31.57105	5.231190	10
10	Setmar	HMGU	31.90504	3.059888	7
11	Setmar	ICS	22.23223	2.673828	7
12	Setmar	MRC_Harwell	30.94181	2.899040	13
13	Slc38a10	HMGU	33.79870	7.119620	7
14	Slc38a10	ICS	20.84580	6.053474	7
15	Slc38a10	MRC_Harwell	32.23275	7.608816	18
16	Tnfaip1	HMGU	37.38385	3.740137	7
17	Tnfaip1	ICS	29.01795	6.516669	8
18	Tnfaip1	MRC_Harwell	27.67919	4.563530	13
19	Ttll4	HMGU	32.25989	6.496081	3
20	Ttll4	ICS	22.46798	4.766728	7
21	Ttll4	MRC_Harwell	36.04774	2.732822	9

S2.GxL= 8.54314 S2.GxL/S2.error= 0.23288935

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	1015.745	169.291	4.615	0.000	0.765	0.611
lab	2	10686.820	5343.410	145.660	0.000		
strain:lab	12	1692.366	141.030	3.844	0.000		
Residuals	1192	43727.455	36.684				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.008	0.995	2.764	0.998
2	Elk4	Arhgef4	-1.071	0.554	3.028	0.730
3	Setmar	Arhgef4	1.192	0.499	3.010	0.699
4	Slc38a10	Arhgef4	1.875	0.271	2.993	0.543
5	Tnfaip1	Arhgef4	3.823	0.029	2.999	0.227
6	Ttll4	Arhgef4	3.308	0.085	3.132	0.312
7	Elk4	baseline	-1.063	0.396	2.700	0.701
8	Setmar	baseline	1.200	0.309	2.679	0.662
9	Slc38a10	baseline	1.883	0.083	2.658	0.492
10	Tnfaip1	baseline	3.831	0.001	2.667	0.176
11	Ttll4	baseline	3.316	0.018	2.812	0.261

12	Setmar	Elk4	2.263	0.183	2.949	0.458
13	Slc38a10	Elk4	2.945	0.072	2.929	0.335
14	Tnfaip1	Elk4	4.894	0.004	2.938	0.122
15	Ttll4	Elk4	4.378	0.019	3.070	0.179
16	Slc38a10	Setmar	0.683	0.666	2.909	0.818
17	Tnfaip1	Setmar	2.631	0.108	2.918	0.385
18	Ttll4	Setmar	2.116	0.244	3.050	0.501
19	Tnfaip1	Slc38a10	1.948	0.214	2.898	0.514
20	Ttll4	Slc38a10	1.433	0.414	3.031	0.645
21	Ttll4	Tnfaip1	-0.515	0.775	3.039	0.868

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-1.811	37.678	289	0.360	18.067	0.697
2	HMGU	Elk4	Arhgef4	-9.190	105.230	15	0.089	26.792	0.171
3	HMGU	Setmar	Arhgef4	-0.785	19.186	15	0.721	18.346	0.868
4	HMGU	Slc38a10	Arhgef4	1.108	35.716	15	0.712	22.614	0.829
5	HMGU	Tnfaip1	Arhgef4	4.693	21.036	15	0.055	18.897	0.332
6	HMGU	Ttll4	Arhgef4	-0.431	28.728	11	0.905	22.707	0.938
7	HMGU	Elk4	baseline	-7.378	41.973	286	0.003	22.065	0.140
8	HMGU	Setmar	baseline	1.026	37.460	286	0.662	20.850	0.831
9	HMGU	Slc38a10	baseline	2.919	38.327	286	0.219	21.081	0.547
10	HMGU	Tnfaip1	baseline	6.504	37.557	286	0.006	20.876	0.186
11	HMGU	Ttll4	baseline	1.380	38.091	282	0.700	35.932	0.802
12	HMGU	Setmar	Elk4	8.404	116.918	12	0.172	21.730	0.250
13	HMGU	Slc38a10	Elk4	10.298	137.581	12	0.126	20.774	0.185
14	HMGU	Tnfaip1	Elk4	13.883	119.231	12	0.035	21.618	0.065
15	HMGU	Ttll4	Elk4	8.759	178.905	8	0.370	11.230	0.405
16	HMGU	Slc38a10	Setmar	1.894	30.026	12	0.530	21.624	0.712
17	HMGU	Tnfaip1	Setmar	5.479	11.676	12	0.011	16.514	0.242
18	HMGU	Ttll4	Setmar	0.355	17.572	8	0.905	19.586	0.945
19	HMGU	Tnfaip1	Slc38a10	3.585	32.339	12	0.261	22.042	0.492
20	HMGU	Ttll4	Slc38a10	-1.539	48.567	8	0.757	17.734	0.811
21	HMGU	Ttll4	Tnfaip1	-5.124	21.041	8	0.144	19.924	0.337
22	ICS	baseline	Arhgef4	3.593	37.214	405	0.123	20.739	0.457
23	ICS	Elk4	Arhgef4	2.929	20.941	12	0.254	19.486	0.549
24	ICS	Setmar	Arhgef4	2.254	14.734	12	0.293	17.575	0.631
25	ICS	Slc38a10	Arhgef4	0.868	29.482	12	0.770	21.518	0.865
26	ICS	Tnfaip1	Arhgef4	9.040	33.168	13	0.010	22.186	0.090
27	ICS	Ttll4	Arhgef4	2.490	22.520	12	0.346	19.915	0.613
28	ICS	Elk4	baseline	-0.664	37.173	405	0.775	20.728	0.890
29	ICS	Setmar	baseline	-1.339	36.989	405	0.564	20.680	0.780
30	ICS	Slc38a10	baseline	-2.725	37.426	405	0.243	20.795	0.572
31	ICS	Tnfaip1	baseline	5.447	37.524	406	0.013	19.616	0.258
32	ICS	Ttll4	baseline	-1.103	37.220	405	0.636	20.741	0.818
33	ICS	Setmar	Elk4	-0.675	13.356	12	0.736	17.105	0.884



34	ICS	Slc38a10	Elk4	-2.061	28.104	12	0.481	21.238	0.685
35	ICS	Tnfaip1	Elk4	6.111	31.896	13	0.057	21.938	0.240
36	ICS	Ttll4	Elk4	-0.439	21.142	12	0.861	19.542	0.928
37	ICS	Slc38a10	Setmar	-1.386	21.897	12	0.590	19.749	0.777
38	ICS	Tnfaip1	Setmar	6.786	26.167	13	0.024	20.656	0.182
39	ICS	Ttll4	Setmar	0.236	14.936	12	0.911	17.642	0.960
40	ICS	Tnfaip1	Slc38a10	8.172	39.780	13	0.026	23.277	0.134
41	ICS	Ttll4	Slc38a10	1.622	29.683	12	0.588	21.558	0.751
42	ICS	Ttll4	Tnfaip1	-6.550	33.354	13	0.047	22.222	0.212
43	MRC_Harwell	baseline	Arhgef4	-1.403	35.083	383	0.638	27.446	0.785
44	MRC_Harwell	Elk4	Arhgef4	2.984	21.204	12	0.295	20.770	0.553
45	MRC_Harwell	Setmar	Arhgef4	2.355	7.267	15	0.147	15.332	0.601
46	MRC_Harwell	Slc38a10	Arhgef4	3.646	49.618	20	0.360	29.030	0.526
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.908	17.204	15	0.707	19.509	0.851
48	MRC_Harwell	Ttll4	Arhgef4	7.461	6.173	11	0.000	15.056	0.110
49	MRC_Harwell	Elk4	baseline	4.387	35.154	389	0.021	17.578	0.348
50	MRC_Harwell	Setmar	baseline	3.758	34.514	392	0.024	16.153	0.411
51	MRC_Harwell	Slc38a10	baseline	5.049	36.304	397	0.001	15.143	0.267
52	MRC_Harwell	Tnfaip1	baseline	0.495	34.894	392	0.766	16.203	0.913
53	MRC_Harwell	Ttll4	baseline	8.864	34.764	388	0.000	18.166	0.069
54	MRC_Harwell	Setmar	Elk4	-0.629	16.531	21	0.717	16.189	0.890
55	MRC_Harwell	Slc38a10	Elk4	0.662	47.326	26	0.809	22.630	0.895
56	MRC_Harwell	Tnfaip1	Elk4	-3.892	23.628	21	0.071	17.975	0.410
57	MRC_Harwell	Ttll4	Elk4	4.477	18.002	17	0.035	17.327	0.341
58	MRC_Harwell	Slc38a10	Setmar	1.291	37.416	29	0.567	19.300	0.786
59	MRC_Harwell	Tnfaip1	Setmar	-3.263	14.615	24	0.040	15.234	0.469
60	MRC_Harwell	Ttll4	Setmar	5.106	8.030	20	0.000	14.148	0.256
61	MRC_Harwell	Tnfaip1	Slc38a10	-4.554	42.555	29	0.065	20.310	0.351
62	MRC_Harwell	Ttll4	Slc38a10	3.815	41.758	25	0.161	22.014	0.445
63	MRC_Harwell	Ttll4	Tnfaip1	8.369	15.483	20	0.000	16.156	0.080

### 34 ESLIM\_011\_001\_007.Acoustic.Startle.PPI.PP1...pulse.startle.magnitude

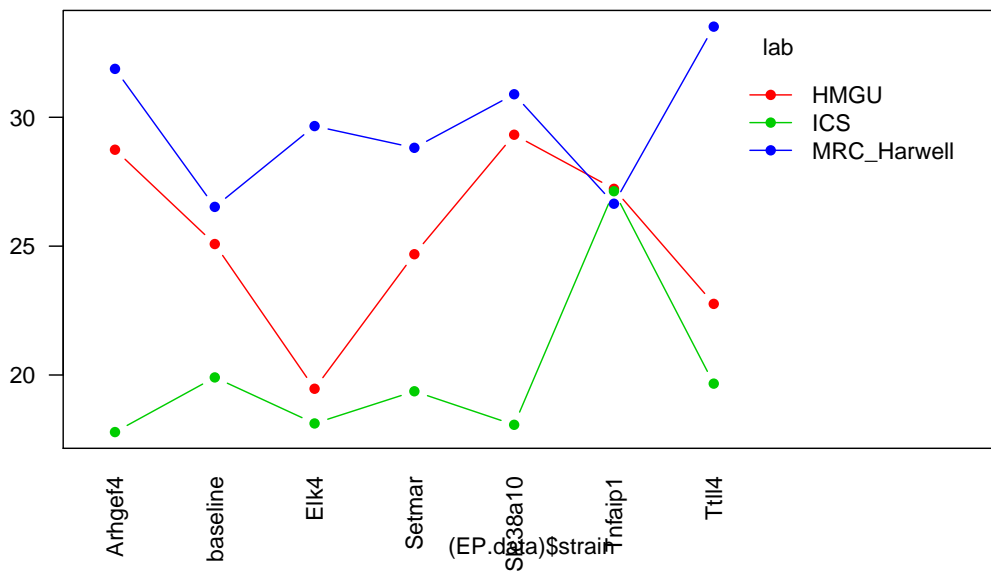
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	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

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## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	28.74094	4.366343	10
2	Arhgef4	ICS	17.78525	6.601697	7
3	Arhgef4	MRC_Harwell	31.87857	6.146216	4
4	baseline	HMGU	25.08137	6.010224	281
5	baseline	ICS	19.90659	6.252670	400
6	baseline	MRC_Harwell	26.52326	5.648695	381
7	Elk4	HMGU	19.46627	12.569477	7
8	Elk4	ICS	18.12013	5.705658	7
9	Elk4	MRC_Harwell	29.65881	6.111460	10
10	Setmar	HMGU	24.68624	5.269813	7
11	Setmar	ICS	19.36874	6.481539	7
12	Setmar	MRC_Harwell	28.81529	4.547208	13
13	Slc38a10	HMGU	29.32253	7.560012	7
14	Slc38a10	ICS	18.06785	5.732521	7
15	Slc38a10	MRC_Harwell	30.89350	8.143009	18
16	Tnfaip1	HMGU	27.22350	4.648812	7
17	Tnfaip1	ICS	27.13135	7.228105	8
18	Tnfaip1	MRC_Harwell	26.64579	4.834980	13
19	Ttll4	HMGU	22.75949	4.214055	3
20	Ttll4	ICS	19.66524	6.983902	7
21	Ttll4	MRC_Harwell	33.51682	3.827610	9

S2.GxL= 6.16847 S2.GxL/S2.error= 0.16927117

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	1071.994	178.666	4.905	0.000	0.701	0.654
lab	2	11486.681	5743.340	157.671	0.000		
strain:lab	12	1292.503	107.709	2.957	0.000		
Residuals	1192	43419.853	36.426				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-2.267	0.089	2.454	0.374
2	Elk4	Arhgef4	-3.528	0.051	2.747	0.223
3	Setmar	Arhgef4	-1.776	0.312	2.726	0.527
4	Slc38a10	Arhgef4	0.075	0.965	2.706	0.978
5	Tnfaip1	Arhgef4	0.627	0.719	2.714	0.821
6	Ttll4	Arhgef4	-0.192	0.920	2.854	0.948
7	Elk4	baseline	-1.261	0.312	2.386	0.607
8	Setmar	baseline	0.491	0.677	2.362	0.839
9	Slc38a10	baseline	2.341	0.031	2.337	0.336
10	Tnfaip1	baseline	2.894	0.012	2.348	0.241
11	Ttll4	baseline	2.075	0.138	2.505	0.424

12	Setmar	Elk4	1.752	0.301	2.661	0.523
13	Slc38a10	Elk4	3.603	0.027	2.638	0.197
14	Tnfaip1	Elk4	4.155	0.013	2.649	0.143
15	Ttll4	Elk4	3.336	0.072	2.789	0.255
16	Slc38a10	Setmar	1.850	0.241	2.615	0.493
17	Tnfaip1	Setmar	2.403	0.140	2.626	0.378
18	Ttll4	Setmar	1.584	0.381	2.767	0.578
19	Tnfaip1	Slc38a10	0.553	0.724	2.603	0.835
20	Ttll4	Slc38a10	-0.266	0.879	2.744	0.924
21	Ttll4	Tnfaip1	-0.819	0.648	2.755	0.771

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-3.660	35.592	289	0.058	20.167	0.371
2	HMGU	Elk4	Arhgef4	-9.275	74.636	15	0.046	26.831	0.104
3	HMGU	Setmar	Arhgef4	-4.055	22.547	15	0.104	21.611	0.347
4	HMGU	Slc38a10	Arhgef4	0.582	34.300	15	0.843	24.676	0.899
5	HMGU	Tnfaip1	Arhgef4	-1.517	20.084	15	0.503	20.767	0.718
6	HMGU	Ttll4	Arhgef4	-5.981	18.827	11	0.060	22.422	0.200
7	HMGU	Elk4	baseline	-5.615	38.679	286	0.019	25.322	0.198
8	HMGU	Setmar	baseline	-0.395	35.948	286	0.863	24.238	0.926
9	HMGU	Slc38a10	baseline	4.241	36.564	286	0.068	24.481	0.323
10	HMGU	Tnfaip1	baseline	2.142	35.818	286	0.350	24.187	0.614
11	HMGU	Ttll4	baseline	-2.322	35.993	282	0.505	45.318	0.641
12	HMGU	Setmar	Elk4	5.220	92.881	12	0.331	21.174	0.412
13	HMGU	Slc38a10	Elk4	9.856	107.573	12	0.101	20.297	0.149
14	HMGU	Tnfaip1	Elk4	7.757	89.802	12	0.152	21.373	0.222
15	HMGU	Ttll4	Elk4	3.293	122.933	8	0.678	11.390	0.703
16	HMGU	Slc38a10	Setmar	4.636	42.462	12	0.208	23.998	0.358
17	HMGU	Tnfaip1	Setmar	2.537	24.691	12	0.358	22.342	0.570
18	HMGU	Ttll4	Setmar	-1.927	25.268	8	0.594	19.293	0.701
19	HMGU	Tnfaip1	Slc38a10	-2.099	39.383	12	0.543	23.949	0.669
20	HMGU	Ttll4	Slc38a10	-6.563	47.305	8	0.204	15.969	0.283
21	HMGU	Ttll4	Tnfaip1	-4.464	20.648	8	0.192	19.843	0.354
22	ICS	baseline	Arhgef4	2.121	39.162	405	0.374	25.468	0.622
23	ICS	Elk4	Arhgef4	0.335	38.068	12	0.921	23.905	0.945
24	ICS	Setmar	Arhgef4	1.583	42.796	12	0.659	24.000	0.752
25	ICS	Slc38a10	Arhgef4	0.283	38.222	12	0.933	23.911	0.954
26	ICS	Tnfaip1	Arhgef4	9.346	48.247	13	0.022	24.993	0.075
27	ICS	Ttll4	Arhgef4	1.880	46.179	12	0.614	23.973	0.713
28	ICS	Elk4	baseline	-1.786	38.999	405	0.453	25.403	0.677
29	ICS	Setmar	baseline	-0.538	39.139	405	0.822	25.459	0.900
30	ICS	Slc38a10	baseline	-1.839	39.004	405	0.440	25.404	0.668
31	ICS	Tnfaip1	baseline	7.225	39.323	406	0.001	23.620	0.096
32	ICS	Ttll4	baseline	-0.241	39.239	405	0.920	25.499	0.955
33	ICS	Setmar	Elk4	1.249	37.282	12	0.709	23.872	0.797

34	ICS	Slc38a10	Elk4	-0.052	32.708	12	0.987	23.552	0.991
35	ICS	Tnfaip1	Elk4	9.011	43.157	13	0.020	24.869	0.077
36	ICS	Ttll4	Elk4	1.545	40.665	12	0.658	23.978	0.755
37	ICS	Slc38a10	Setmar	-1.301	37.436	12	0.698	23.879	0.789
38	ICS	Tnfaip1	Setmar	7.763	47.522	13	0.049	24.985	0.134
39	ICS	Ttll4	Setmar	0.296	45.393	12	0.936	23.985	0.953
40	ICS	Tnfaip1	Slc38a10	9.064	43.299	13	0.020	24.875	0.076
41	ICS	Ttll4	Slc38a10	1.597	40.818	12	0.648	23.981	0.747
42	ICS	Ttll4	Tnfaip1	-7.466	50.644	13	0.064	24.999	0.155
43	MRC_Harwell	baseline	Arhgef4	-5.355	31.954	383	0.060	32.407	0.244
44	MRC_Harwell	Elk4	Arhgef4	-2.220	37.456	12	0.551	23.978	0.664
45	MRC_Harwell	Setmar	Arhgef4	-3.063	24.097	15	0.292	24.294	0.502
46	MRC_Harwell	Slc38a10	Arhgef4	-0.985	62.029	20	0.823	31.949	0.861
47	MRC_Harwell	Tnfaip1	Arhgef4	-5.233	26.257	15	0.094	24.875	0.263
48	MRC_Harwell	Ttll4	Arhgef4	1.638	20.958	11	0.564	22.147	0.717
49	MRC_Harwell	Elk4	baseline	3.136	32.034	389	0.085	19.205	0.437
50	MRC_Harwell	Setmar	baseline	2.292	31.564	392	0.149	17.360	0.560
51	MRC_Harwell	Slc38a10	baseline	4.370	33.381	397	0.002	16.063	0.264
52	MRC_Harwell	Tnfaip1	baseline	0.123	31.647	392	0.938	17.375	0.975
53	MRC_Harwell	Ttll4	baseline	6.994	31.552	388	0.000	19.944	0.095
54	MRC_Harwell	Setmar	Elk4	-0.844	27.823	21	0.708	21.528	0.841
55	MRC_Harwell	Slc38a10	Elk4	1.235	56.284	26	0.680	28.461	0.790
56	MRC_Harwell	Tnfaip1	Elk4	-3.013	29.365	21	0.200	22.005	0.479
57	MRC_Harwell	Ttll4	Elk4	3.858	26.668	17	0.122	22.189	0.373
58	MRC_Harwell	Slc38a10	Setmar	2.078	47.427	29	0.414	24.686	0.634
59	MRC_Harwell	Tnfaip1	Setmar	-2.170	22.027	24	0.250	18.789	0.591
60	MRC_Harwell	Ttll4	Setmar	4.702	18.266	20	0.020	18.740	0.251
61	MRC_Harwell	Tnfaip1	Slc38a10	-4.248	48.544	29	0.105	24.965	0.336
62	MRC_Harwell	Ttll4	Slc38a10	2.623	49.778	25	0.371	27.580	0.568
63	MRC_Harwell	Ttll4	Tnfaip1	6.871	19.886	20	0.002	19.312	0.103

### 35 ESLIM\_011\_001\_008.Acoustic.Startle.PPI.PP2...pulse.startle.magnitu

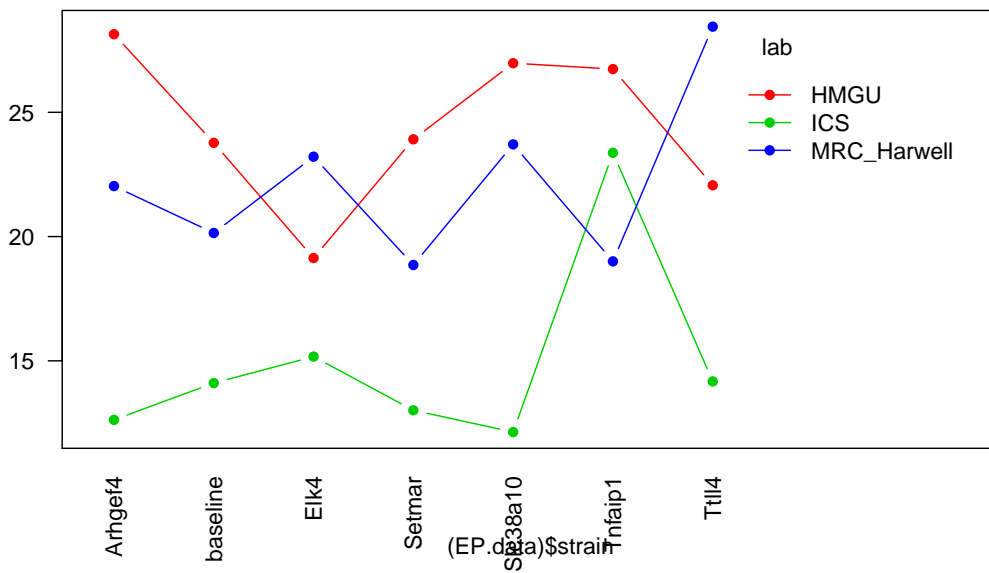
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	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

of ESLIM\_011\_001\_008.Acoustic.Startle.PPI.PP2...pulse.startle.mz



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	



	strain	lab	mean	sd	n
1	Arhgef4	HMGU	28.14186	4.706486	10
2	Arhgef4	ICS	12.62477	4.910989	7
3	Arhgef4	MRC_Harwell	22.03028	4.027690	4
4	baseline	HMGU	23.77167	5.809601	281
5	baseline	ICS	14.10595	5.659331	400
6	baseline	MRC_Harwell	20.14450	4.779078	381
7	Elk4	HMGU	19.13589	12.002259	7
8	Elk4	ICS	15.17012	5.124667	7
9	Elk4	MRC_Harwell	23.21365	4.809287	10
10	Setmar	HMGU	23.91354	3.309071	7
11	Setmar	ICS	13.01002	5.096983	7
12	Setmar	MRC_Harwell	18.85643	4.051286	13
13	Slc38a10	HMGU	26.97610	8.041873	7
14	Slc38a10	ICS	12.13307	4.243025	7
15	Slc38a10	MRC_Harwell	23.70847	6.712381	18
16	Tnfaip1	HMGU	26.73921	5.451323	7
17	Tnfaip1	ICS	23.37090	8.310129	8
18	Tnfaip1	MRC_Harwell	19.00199	3.554528	13
19	Ttll4	HMGU	22.06424	1.988436	3
20	Ttll4	ICS	14.17196	6.045504	7
21	Ttll4	MRC_Harwell	28.44664	6.765703	9

S2.GxL= 10.41339 S2.GxL/S2.error= 0.34841957

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	940.562	156.760	5.246	0.000	0.548	0.763
lab	2	18655.664	9327.832	312.161	0.000		
strain:lab	12	1467.055	122.255	4.091	0.000		
Residuals	1192	35618.678	29.881				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-1.728	0.152	2.923	0.565
2	Elk4	Arhgef4	-1.815	0.267	3.129	0.573
3	Setmar	Arhgef4	-2.533	0.112	3.116	0.432
4	Slc38a10	Arhgef4	-0.040	0.979	3.103	0.990
5	Tnfaip1	Arhgef4	1.768	0.263	3.107	0.580
6	Ttll4	Arhgef4	0.948	0.584	3.216	0.773
7	Elk4	baseline	-0.087	0.939	2.871	0.976
8	Setmar	baseline	-0.805	0.450	2.856	0.783
9	Slc38a10	baseline	1.688	0.085	2.841	0.563
10	Tnfaip1	baseline	3.496	0.001	2.846	0.243
11	Ttll4	baseline	2.676	0.035	2.963	0.384

12	Setmar	Elk4	-0.718	0.640	3.066	0.819
13	Slc38a10	Elk4	1.775	0.229	3.051	0.572
14	Tnfaip1	Elk4	3.583	0.019	3.057	0.264
15	Ttll4	Elk4	2.763	0.100	3.165	0.400
16	Slc38a10	Setmar	2.493	0.081	3.036	0.428
17	Tnfaip1	Setmar	4.301	0.004	3.042	0.183
18	Ttll4	Setmar	3.481	0.034	3.151	0.291
19	Tnfaip1	Slc38a10	1.808	0.202	3.027	0.562
20	Ttll4	Slc38a10	0.988	0.533	3.137	0.758
21	Ttll4	Tnfaip1	-0.820	0.614	3.142	0.799

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-4.370	33.390	289	0.019	16.297	0.388
2	HMGU	Elk4	Arhgef4	-9.006	70.912	15	0.046	25.889	0.156
3	HMGU	Setmar	Arhgef4	-4.228	17.671	15	0.059	16.881	0.411
4	HMGU	Slc38a10	Arhgef4	-1.166	39.159	15	0.711	21.821	0.834
5	HMGU	Tnfaip1	Arhgef4	-1.403	25.177	15	0.579	18.785	0.790
6	HMGU	Ttll4	Arhgef4	-6.078	18.842	11	0.057	19.914	0.272
7	HMGU	Elk4	baseline	-4.636	36.066	286	0.045	18.806	0.376
8	HMGU	Setmar	baseline	0.142	33.273	286	0.949	18.229	0.978
9	HMGU	Slc38a10	baseline	3.204	34.400	286	0.154	18.461	0.536
10	HMGU	Tnfaip1	baseline	2.968	33.667	286	0.182	18.310	0.566
11	HMGU	Ttll4	baseline	-1.707	33.540	282	0.612	28.200	0.765
12	HMGU	Setmar	Elk4	4.778	77.502	12	0.330	23.977	0.473
13	HMGU	Slc38a10	Elk4	7.840	104.363	12	0.177	23.267	0.282
14	HMGU	Tnfaip1	Elk4	7.603	86.886	12	0.153	23.817	0.272
15	HMGU	Ttll4	Elk4	2.928	109.029	8	0.695	14.184	0.736
16	HMGU	Slc38a10	Setmar	3.063	37.811	12	0.370	21.810	0.592
17	HMGU	Tnfaip1	Setmar	2.826	20.333	12	0.264	18.211	0.591
18	HMGU	Ttll4	Setmar	-1.849	9.201	8	0.403	16.486	0.717
19	HMGU	Tnfaip1	Slc38a10	-0.237	47.194	12	0.950	22.949	0.968
20	HMGU	Ttll4	Slc38a10	-4.912	49.492	8	0.341	18.668	0.470
21	HMGU	Ttll4	Tnfaip1	-4.675	23.276	8	0.198	19.772	0.418
22	ICS	baseline	Arhgef4	1.481	31.911	405	0.492	17.914	0.772
23	ICS	Elk4	Arhgef4	2.545	25.190	12	0.361	19.409	0.636
24	ICS	Setmar	Arhgef4	0.385	25.049	12	0.888	19.376	0.943
25	ICS	Slc38a10	Arhgef4	-0.492	21.061	12	0.844	18.400	0.925
26	ICS	Tnfaip1	Arhgef4	10.746	48.317	13	0.010	23.258	0.077
27	ICS	Ttll4	Arhgef4	1.547	30.333	12	0.609	20.513	0.779
28	ICS	Elk4	baseline	1.064	31.943	405	0.622	17.921	0.835
29	ICS	Setmar	baseline	-1.096	31.938	405	0.611	17.920	0.831
30	ICS	Slc38a10	baseline	-1.973	31.820	405	0.360	17.896	0.700
31	ICS	Tnfaip1	baseline	9.265	32.666	406	0.000	17.259	0.081
32	ICS	Ttll4	baseline	0.066	32.095	405	0.976	17.951	0.990
33	ICS	Setmar	Elk4	-2.160	26.121	12	0.444	19.621	0.689

34	ICS	Slc38a10	Elk4	-3.037	22.133	12	0.250	18.672	0.567
35	ICS	Tnfaip1	Elk4	8.201	49.306	13	0.042	23.370	0.173
36	ICS	Ttll4	Elk4	-0.998	31.405	12	0.745	20.721	0.857
37	ICS	Slc38a10	Setmar	-0.877	21.991	12	0.733	18.637	0.868
38	ICS	Tnfaip1	Setmar	10.361	49.176	13	0.014	23.355	0.089
39	ICS	Ttll4	Setmar	1.162	31.264	12	0.704	20.694	0.833
40	ICS	Tnfaip1	Slc38a10	11.238	45.494	13	0.007	22.911	0.063
41	ICS	Ttll4	Slc38a10	2.039	27.276	12	0.479	19.877	0.707
42	ICS	Ttll4	Tnfaip1	-9.199	54.054	13	0.031	23.846	0.135
43	MRC_Harwell	baseline	Arhgef4	-1.886	22.788	383	0.432	19.504	0.718
44	MRC_Harwell	Elk4	Arhgef4	1.183	21.403	12	0.673	19.643	0.826
45	MRC_Harwell	Setmar	Arhgef4	-3.174	16.375	15	0.190	18.010	0.543
46	MRC_Harwell	Slc38a10	Arhgef4	1.678	40.731	20	0.639	25.223	0.773
47	MRC_Harwell	Tnfaip1	Arhgef4	-3.028	13.352	15	0.168	16.961	0.554
48	MRC_Harwell	Ttll4	Arhgef4	6.416	37.715	11	0.110	22.384	0.286
49	MRC_Harwell	Elk4	baseline	3.069	22.846	389	0.046	14.848	0.533
50	MRC_Harwell	Setmar	baseline	-1.288	22.643	392	0.338	14.162	0.790
51	MRC_Harwell	Slc38a10	baseline	3.564	23.791	397	0.003	13.646	0.462
52	MRC_Harwell	Tnfaip1	baseline	-1.143	22.527	392	0.394	14.151	0.814
53	MRC_Harwell	Ttll4	baseline	8.302	23.312	388	0.000	15.242	0.107
54	MRC_Harwell	Setmar	Elk4	-4.357	19.291	21	0.028	16.010	0.389
55	MRC_Harwell	Slc38a10	Elk4	0.495	37.466	26	0.839	18.970	0.925
56	MRC_Harwell	Tnfaip1	Elk4	-4.212	17.132	21	0.025	15.559	0.402
57	MRC_Harwell	Ttll4	Elk4	5.233	33.786	17	0.067	19.973	0.334
58	MRC_Harwell	Slc38a10	Setmar	4.852	33.204	29	0.028	17.285	0.347
59	MRC_Harwell	Tnfaip1	Setmar	0.146	14.524	24	0.923	14.629	0.976
60	MRC_Harwell	Ttll4	Setmar	9.590	28.158	20	0.000	18.172	0.077
61	MRC_Harwell	Tnfaip1	Slc38a10	-4.706	31.640	29	0.029	17.031	0.360
62	MRC_Harwell	Ttll4	Slc38a10	4.738	45.286	25	0.097	20.953	0.384
63	MRC_Harwell	Ttll4	Tnfaip1	9.445	25.891	20	0.000	17.686	0.079

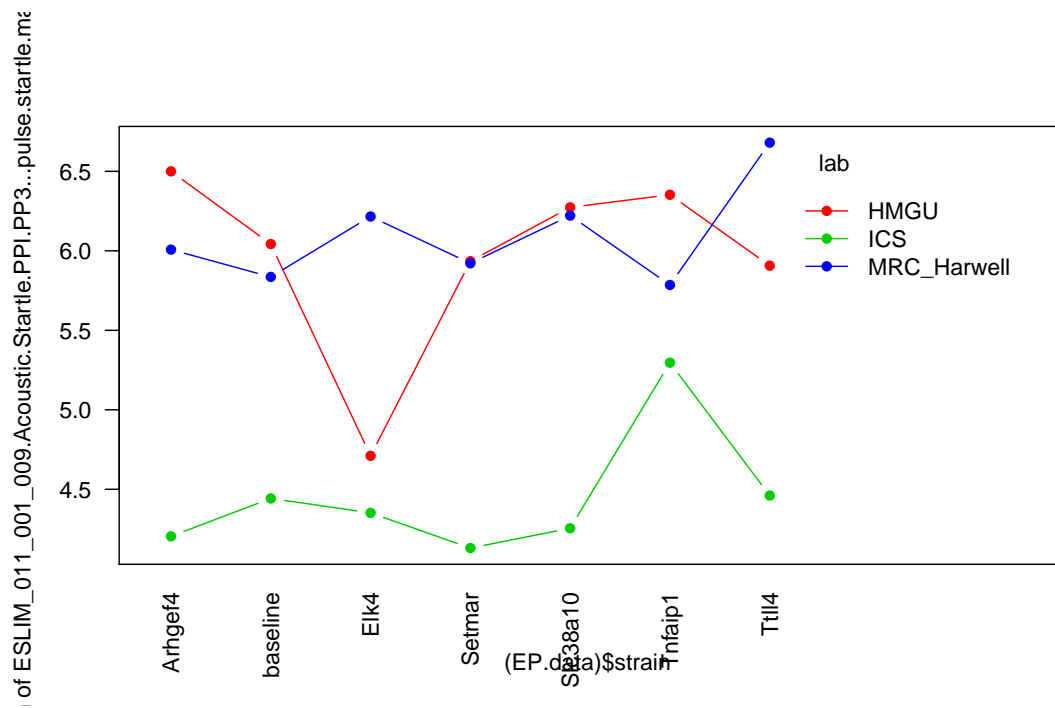
### 36 ESLIM\_011\_001\_009.Acoustic.Startle.PPI.PP3...pulse.startle.magnitude

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	6.500002	0.3022305	10
2	Arhgef4	ICS	4.204004	0.4502534	7
3	Arhgef4	MRC_Harwell	6.007620	0.5296071	4
4	baseline	HMGU	6.042556	0.5685968	281
5	baseline	ICS	4.442266	0.6525626	400
6	baseline	MRC_Harwell	5.835681	0.4353042	381
7	Elk4	HMGU	4.710399	2.5236434	7
8	Elk4	ICS	4.351492	0.4594042	7
9	Elk4	MRC_Harwell	6.215944	0.4964537	10
10	Setmar	HMGU	5.934546	0.4093548	7
11	Setmar	ICS	4.129939	0.6774384	7
12	Setmar	MRC_Harwell	5.921797	0.3417800	13
13	Slc38a10	HMGU	6.273504	0.6061940	7
14	Slc38a10	ICS	4.254800	0.4698567	7
15	Slc38a10	MRC_Harwell	6.221499	0.5687724	18
16	Tnfaip1	HMGU	6.352648	0.3511922	7
17	Tnfaip1	ICS	5.296461	0.7257191	8
18	Tnfaip1	MRC_Harwell	5.785099	0.3402959	13
19	Ttll4	HMGU	5.906555	0.3046089	3
20	Ttll4	ICS	4.460434	0.8074543	7
21	Ttll4	MRC_Harwell	6.680585	0.4114510	9

S2.GxL= 0.17366 S2.GxL/S2.error= 0.5142796

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	14.825	2.471	7.318	0.000	0.769	0.608
lab	2	631.241	315.621	934.765	0.000		
strain:lab	12	24.011	2.001	5.926	0.000		
Residuals	1192	402.475	0.338				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.148	0.248	0.366	0.693
2	Elk4	Arhgef4	-0.483	0.006	0.385	0.234
3	Setmar	Arhgef4	-0.258	0.127	0.384	0.514
4	Slc38a10	Arhgef4	-0.001	0.995	0.383	0.998
5	Tnfaip1	Arhgef4	0.207	0.217	0.383	0.599
6	Ttll4	Arhgef4	0.121	0.512	0.393	0.764
7	Elk4	baseline	-0.335	0.005	0.361	0.372
8	Setmar	baseline	-0.110	0.330	0.360	0.765
9	Slc38a10	baseline	0.147	0.159	0.359	0.689
10	Tnfaip1	baseline	0.355	0.001	0.359	0.343
11	Ttll4	baseline	0.268	0.046	0.370	0.482

12	Setmar	Elk4	0.224	0.169	0.379	0.565
13	Slc38a10	Elk4	0.482	0.002	0.378	0.226
14	Tnfaip1	Elk4	0.690	0.000	0.378	0.093
15	Ttll4	Elk4	0.603	0.001	0.388	0.146
16	Slc38a10	Setmar	0.257	0.091	0.376	0.508
17	Tnfaip1	Setmar	0.465	0.003	0.377	0.241
18	Ttll4	Setmar	0.379	0.030	0.387	0.347
19	Tnfaip1	Slc38a10	0.208	0.167	0.376	0.590
20	Ttll4	Slc38a10	0.122	0.470	0.386	0.758
21	Ttll4	Tnfaip1	-0.086	0.617	0.386	0.827

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.457	0.316	289	0.012	14.363	0.470
2	HMGU	Elk4	Arhgef4	-1.790	2.602	15	0.040	26.146	0.082
3	HMGU	Setmar	Arhgef4	-0.565	0.122	15	0.005	14.050	0.373
4	HMGU	Slc38a10	Arhgef4	-0.226	0.202	15	0.322	15.380	0.724
5	HMGU	Tnfaip1	Arhgef4	-0.147	0.104	15	0.369	13.753	0.813
6	HMGU	Ttll4	Arhgef4	-0.593	0.092	11	0.013	14.690	0.356
7	HMGU	Elk4	baseline	-1.332	0.450	286	0.000	16.961	0.054
8	HMGU	Setmar	baseline	-0.108	0.320	286	0.618	15.445	0.866
9	HMGU	Slc38a10	baseline	0.231	0.324	286	0.290	15.492	0.718
10	HMGU	Tnfaip1	baseline	0.310	0.319	286	0.152	15.434	0.628
11	HMGU	Ttll4	baseline	-0.136	0.322	282	0.680	20.571	0.842
12	HMGU	Setmar	Elk4	1.224	3.268	12	0.229	19.842	0.292
13	HMGU	Slc38a10	Elk4	1.563	3.368	12	0.137	19.664	0.187
14	HMGU	Tnfaip1	Elk4	1.642	3.246	12	0.114	19.882	0.161
15	HMGU	Ttll4	Elk4	1.196	4.800	8	0.452	10.455	0.477
16	HMGU	Slc38a10	Setmar	0.339	0.268	12	0.244	17.038	0.609
17	HMGU	Tnfaip1	Setmar	0.418	0.145	12	0.063	14.831	0.513
18	HMGU	Ttll4	Setmar	-0.028	0.149	8	0.919	16.375	0.966
19	HMGU	Tnfaip1	Slc38a10	0.079	0.245	12	0.770	16.655	0.904
20	HMGU	Ttll4	Slc38a10	-0.367	0.299	8	0.359	19.050	0.606
21	HMGU	Ttll4	Tnfaip1	-0.446	0.116	8	0.094	15.523	0.492
22	ICS	baseline	Arhgef4	0.238	0.423	405	0.337	16.604	0.714
23	ICS	Elk4	Arhgef4	0.147	0.207	12	0.555	15.970	0.820
24	ICS	Setmar	Arhgef4	-0.074	0.331	12	0.814	18.081	0.913
25	ICS	Slc38a10	Arhgef4	0.051	0.212	12	0.840	16.057	0.938
26	ICS	Tnfaip1	Arhgef4	1.092	0.377	13	0.004	18.548	0.120
27	ICS	Ttll4	Arhgef4	0.256	0.427	12	0.477	19.509	0.712
28	ICS	Elk4	baseline	-0.091	0.423	405	0.714	16.605	0.889
29	ICS	Setmar	baseline	-0.312	0.426	405	0.210	16.648	0.632
30	ICS	Slc38a10	baseline	-0.187	0.423	405	0.450	16.607	0.773
31	ICS	Tnfaip1	baseline	0.854	0.428	406	0.000	16.051	0.197
32	ICS	Ttll4	baseline	0.018	0.429	405	0.942	16.682	0.978
33	ICS	Setmar	Elk4	-0.222	0.335	12	0.488	18.147	0.743

34	ICS	Slc38a10	Elk4	-0.097	0.216	12	0.704	16.132	0.882
35	ICS	Tnfaip1	Elk4	0.945	0.381	13	0.011	18.605	0.175
36	ICS	Ttll4	Elk4	0.109	0.432	12	0.762	19.566	0.875
37	ICS	Slc38a10	Setmar	0.125	0.340	12	0.696	18.223	0.853
38	ICS	Tnfaip1	Setmar	1.167	0.495	13	0.007	20.199	0.108
39	ICS	Ttll4	Setmar	0.330	0.555	12	0.423	21.072	0.647
40	ICS	Tnfaip1	Slc38a10	1.042	0.385	13	0.006	18.672	0.137
41	ICS	Ttll4	Slc38a10	0.206	0.436	12	0.571	19.632	0.768
42	ICS	Ttll4	Tnfaip1	-0.836	0.585	13	0.055	21.268	0.252
43	MRC_Harwell	baseline	Arhgef4	-0.172	0.190	383	0.433	15.541	0.788
44	MRC_Harwell	Elk4	Arhgef4	0.208	0.255	12	0.499	17.785	0.756
45	MRC_Harwell	Setmar	Arhgef4	-0.086	0.150	15	0.703	15.372	0.893
46	MRC_Harwell	Slc38a10	Arhgef4	0.214	0.317	20	0.500	18.752	0.752
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.223	0.149	15	0.329	15.355	0.728
48	MRC_Harwell	Ttll4	Arhgef4	0.673	0.200	11	0.029	16.713	0.314
49	MRC_Harwell	Elk4	baseline	0.380	0.191	389	0.007	13.390	0.541
50	MRC_Harwell	Setmar	baseline	0.086	0.187	392	0.481	13.051	0.888
51	MRC_Harwell	Slc38a10	baseline	0.386	0.195	397	0.000	12.797	0.531
52	MRC_Harwell	Tnfaip1	baseline	-0.051	0.187	392	0.679	13.051	0.934
53	MRC_Harwell	Ttll4	baseline	0.845	0.189	388	0.000	13.530	0.187
54	MRC_Harwell	Setmar	Elk4	-0.294	0.172	21	0.107	14.138	0.640
55	MRC_Harwell	Slc38a10	Elk4	0.006	0.297	26	0.980	15.278	0.993
56	MRC_Harwell	Tnfaip1	Elk4	-0.431	0.172	21	0.022	14.130	0.495
57	MRC_Harwell	Ttll4	Elk4	0.465	0.210	17	0.041	15.088	0.469
58	MRC_Harwell	Slc38a10	Setmar	0.300	0.238	29	0.102	14.229	0.634
59	MRC_Harwell	Tnfaip1	Setmar	-0.137	0.116	24	0.317	13.251	0.824
60	MRC_Harwell	Ttll4	Setmar	0.759	0.138	20	0.000	13.811	0.235
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.436	0.238	29	0.020	14.225	0.490
62	MRC_Harwell	Ttll4	Slc38a10	0.459	0.274	25	0.042	15.238	0.475
63	MRC_Harwell	Ttll4	Tnfaip1	0.895	0.137	20	0.000	13.803	0.165



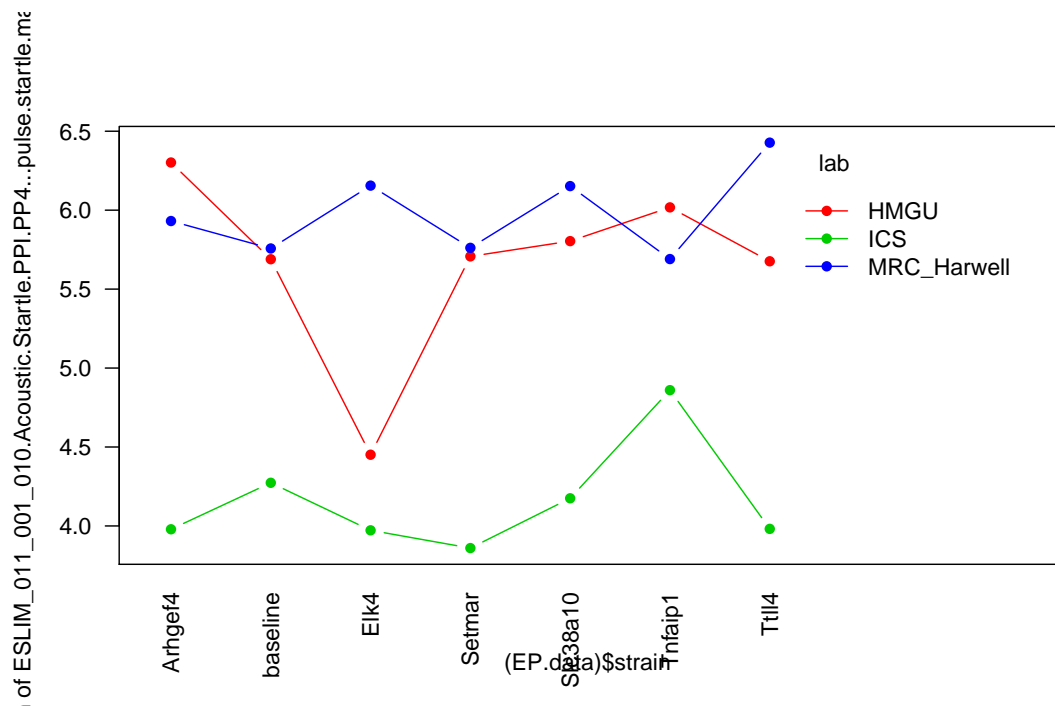
### 37 ESLIM\_011\_001\_010.Acoustic.Startle.PPI.PP4...pulse.startle.magnitude

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	6.301774	0.2967704	10
2	Arhgef4	ICS	3.978871	0.3461914	7
3	Arhgef4	MRC_Harwell	5.931160	0.4347203	4
4	baseline	HMGU	5.689183	0.5199855	281
5	baseline	ICS	4.273324	0.4957142	400
6	baseline	MRC_Harwell	5.757341	0.4459845	381
7	Elk4	HMGU	4.451086	2.3431191	7
8	Elk4	ICS	3.972404	0.4398686	7
9	Elk4	MRC_Harwell	6.155355	0.4449235	10
10	Setmar	HMGU	5.707297	0.3754523	7
11	Setmar	ICS	3.859800	0.3289209	7
12	Setmar	MRC_Harwell	5.761299	0.3812386	13
13	Slc38a10	HMGU	5.803910	0.5632194	7
14	Slc38a10	ICS	4.175148	0.3850382	7
15	Slc38a10	MRC_Harwell	6.152378	0.5804084	18
16	Tnfaip1	HMGU	6.017715	0.3033491	7
17	Tnfaip1	ICS	4.860108	0.5750803	8
18	Tnfaip1	MRC_Harwell	5.690291	0.3960881	13
19	Ttll4	HMGU	5.676255	0.3815578	3
20	Ttll4	ICS	3.981534	0.7721657	7
21	Ttll4	MRC_Harwell	6.427628	0.4742293	9

S2.GxL= 0.15863 S2.GxL/S2.error= 0.61099295

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	12.829	2.138	8.235	0.000	0.754	0.619
lab	2	620.327	310.163	1194.646	0.000		
strain:lab	12	22.244	1.854	7.140	0.000		
Residuals	1192	309.477	0.260				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.181	0.107	0.346	0.610
2	Elk4	Arhgef4	-0.550	0.000	0.362	0.154
3	Setmar	Arhgef4	-0.313	0.035	0.361	0.403
4	Slc38a10	Arhgef4	-0.040	0.778	0.360	0.912
5	Tnfaip1	Arhgef4	0.089	0.547	0.360	0.809
6	Ttll4	Arhgef4	-0.048	0.765	0.369	0.898
7	Elk4	baseline	-0.368	0.000	0.342	0.303
8	Setmar	baseline	-0.132	0.185	0.341	0.706
9	Slc38a10	baseline	0.141	0.124	0.340	0.686
10	Tnfaip1	baseline	0.270	0.006	0.340	0.443
11	Ttll4	baseline	0.133	0.260	0.349	0.710

12	Setmar	Elk4	0.237	0.098	0.357	0.519
13	Slc38a10	Elk4	0.509	0.000	0.356	0.178
14	Tnfaip1	Elk4	0.638	0.000	0.356	0.098
15	Ttll4	Elk4	0.501	0.001	0.365	0.194
16	Slc38a10	Setmar	0.272	0.041	0.355	0.457
17	Tnfaip1	Setmar	0.402	0.004	0.355	0.280
18	Ttll4	Setmar	0.265	0.083	0.364	0.481
19	Tnfaip1	Slc38a10	0.129	0.328	0.354	0.722
20	Ttll4	Slc38a10	-0.008	0.957	0.363	0.983
21	Ttll4	Tnfaip1	-0.137	0.366	0.363	0.712

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	-0.613	0.265	289	0.000	14.159	0.314
2	HMGU	Elk4	Arhgef4	-1.851	2.249	15	0.024	26.367	0.057
3	HMGU	Setmar	Arhgef4	-0.594	0.109	15	0.002	14.012	0.328
4	HMGU	Slc38a10	Arhgef4	-0.498	0.180	15	0.031	15.297	0.420
5	HMGU	Tnfaip1	Arhgef4	-0.284	0.090	15	0.073	13.652	0.633
6	HMGU	Ttll4	Arhgef4	-0.626	0.099	11	0.012	15.148	0.313
7	HMGU	Elk4	baseline	-1.238	0.380	286	0.000	16.555	0.059
8	HMGU	Setmar	baseline	0.018	0.268	286	0.927	15.138	0.976
9	HMGU	Slc38a10	baseline	0.115	0.271	286	0.565	15.184	0.850
10	HMGU	Tnfaip1	baseline	0.329	0.267	286	0.097	15.125	0.590
11	HMGU	Ttll4	baseline	-0.013	0.269	282	0.966	19.782	0.984
12	HMGU	Setmar	Elk4	1.256	2.816	12	0.187	20.191	0.249
13	HMGU	Slc38a10	Elk4	1.353	2.904	12	0.163	20.007	0.221
14	HMGU	Tnfaip1	Elk4	1.567	2.791	12	0.105	20.244	0.153
15	HMGU	Ttll4	Elk4	1.225	4.154	8	0.409	10.590	0.436
16	HMGU	Slc38a10	Setmar	0.097	0.229	12	0.712	16.749	0.878
17	HMGU	Tnfaip1	Setmar	0.310	0.116	12	0.115	14.490	0.608
18	HMGU	Ttll4	Setmar	-0.031	0.142	8	0.908	16.537	0.961
19	HMGU	Tnfaip1	Slc38a10	0.214	0.205	12	0.394	16.277	0.732
20	HMGU	Ttll4	Slc38a10	-0.128	0.274	8	0.733	19.067	0.851
21	HMGU	Ttll4	Tnfaip1	-0.341	0.105	8	0.166	15.515	0.581
22	ICS	baseline	Arhgef4	0.294	0.244	405	0.119	14.826	0.627
23	ICS	Elk4	Arhgef4	-0.006	0.157	12	0.976	15.320	0.992
24	ICS	Setmar	Arhgef4	-0.119	0.114	12	0.522	14.439	0.843
25	ICS	Slc38a10	Arhgef4	0.196	0.134	12	0.336	14.856	0.747
26	ICS	Tnfaip1	Arhgef4	0.881	0.233	13	0.004	16.600	0.171
27	ICS	Ttll4	Arhgef4	0.003	0.358	12	0.993	19.010	0.997
28	ICS	Elk4	baseline	-0.301	0.245	405	0.112	14.839	0.620
29	ICS	Setmar	baseline	-0.414	0.244	405	0.029	14.824	0.497
30	ICS	Slc38a10	baseline	-0.098	0.244	405	0.603	14.831	0.871
31	ICS	Tnfaip1	baseline	0.587	0.247	406	0.001	14.498	0.337
32	ICS	Ttll4	baseline	-0.292	0.251	405	0.127	14.912	0.631
33	ICS	Setmar	Elk4	-0.113	0.151	12	0.597	15.201	0.854

34	ICS	Slc38a10	Elk4	0.203	0.171	12	0.377	15.608	0.742
35	ICS	Tnfaip1	Elk4	0.888	0.267	13	0.006	17.219	0.172
36	ICS	Ttll4	Elk4	0.009	0.395	12	0.979	19.576	0.989
37	ICS	Slc38a10	Setmar	0.315	0.128	12	0.125	14.735	0.604
38	ICS	Tnfaip1	Setmar	1.000	0.228	13	0.001	16.500	0.123
39	ICS	Ttll4	Setmar	0.122	0.352	12	0.708	18.917	0.853
40	ICS	Tnfaip1	Slc38a10	0.685	0.247	13	0.019	16.841	0.284
41	ICS	Ttll4	Slc38a10	-0.194	0.372	12	0.564	19.233	0.769
42	ICS	Ttll4	Tnfaip1	-0.879	0.453	13	0.026	20.210	0.199
43	MRC_Harwell	baseline	Arhgef4	-0.174	0.199	383	0.438	16.088	0.778
44	MRC_Harwell	Elk4	Arhgef4	0.224	0.196	12	0.408	16.951	0.723
45	MRC_Harwell	Setmar	Arhgef4	-0.170	0.154	15	0.461	15.794	0.783
46	MRC_Harwell	Slc38a10	Arhgef4	0.221	0.315	20	0.484	19.312	0.735
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.241	0.163	15	0.314	16.016	0.698
48	MRC_Harwell	Ttll4	Arhgef4	0.496	0.215	11	0.102	17.454	0.440
49	MRC_Harwell	Elk4	baseline	0.398	0.199	389	0.006	13.592	0.505
50	MRC_Harwell	Setmar	baseline	0.004	0.197	392	0.975	13.215	0.995
51	MRC_Harwell	Slc38a10	baseline	0.395	0.205	397	0.000	12.918	0.503
52	MRC_Harwell	Tnfaip1	baseline	-0.067	0.198	392	0.593	13.218	0.909
53	MRC_Harwell	Ttll4	baseline	0.670	0.199	388	0.000	13.775	0.270
54	MRC_Harwell	Setmar	Elk4	-0.394	0.168	21	0.033	14.281	0.514
55	MRC_Harwell	Slc38a10	Elk4	-0.003	0.289	26	0.989	15.495	0.996
56	MRC_Harwell	Tnfaip1	Elk4	-0.465	0.174	21	0.015	14.371	0.443
57	MRC_Harwell	Ttll4	Elk4	0.272	0.211	17	0.214	15.386	0.657
58	MRC_Harwell	Slc38a10	Setmar	0.391	0.258	29	0.043	14.650	0.520
59	MRC_Harwell	Tnfaip1	Setmar	-0.071	0.151	24	0.646	13.786	0.905
60	MRC_Harwell	Ttll4	Setmar	0.666	0.177	20	0.002	14.556	0.279
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.462	0.262	29	0.019	14.701	0.448
62	MRC_Harwell	Ttll4	Slc38a10	0.275	0.301	25	0.231	15.905	0.656
63	MRC_Harwell	Ttll4	Tnfaip1	0.737	0.184	20	0.001	14.657	0.233

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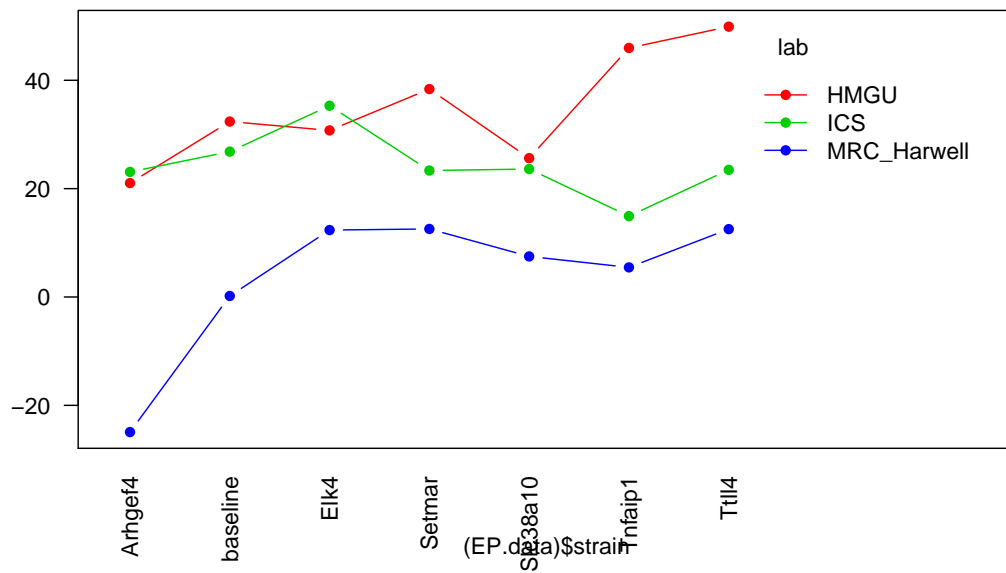
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	5
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	7
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

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## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	21.0268543	17.541131	10
2	Arhgef4	ICS	23.0876961	26.454224	7
3	Arhgef4	MRC_Harwell	-24.9370324	33.665377	4
4	baseline	HMGU	32.3797285	19.557766	281
5	baseline	ICS	26.8337022	24.265738	400
6	baseline	MRC_Harwell	0.1856998	37.007506	381
7	Elk4	HMGU	30.7490241	20.440430	5
8	Elk4	ICS	35.3025695	25.093398	7
9	Elk4	MRC_Harwell	12.3533256	14.429083	10
10	Setmar	HMGU	38.3773378	24.245738	7
11	Setmar	ICS	23.3426192	36.431975	7
12	Setmar	MRC_Harwell	12.5571453	19.930393	13
13	Slc38a10	HMGU	25.6257518	9.639324	7
14	Slc38a10	ICS	23.6207432	19.246135	7
15	Slc38a10	MRC_Harwell	7.4896977	20.700269	18
16	Tnfaip1	HMGU	45.9656208	14.716087	7
17	Tnfaip1	ICS	14.9258946	16.086332	7
18	Tnfaip1	MRC_Harwell	5.4629283	24.549032	13
19	Ttll4	HMGU	49.9023243	5.306603	3
20	Ttll4	ICS	23.4662786	27.289556	7
21	Ttll4	MRC_Harwell	12.5265635	16.679848	9

S2.GxL= 3.38316 S2.GxL/S2.error= 0.00436671

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	2284.753	380.792	0.490	0.816	1.227	0.358
lab	2	227658.548	113829.274	146.583	0.000		
strain:lab	12	7686.465	640.539	0.825	0.625		
Residuals	1189	923322.029	776.553				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	11.243	0.067	6.344	0.102
2	Elk4	Arhgef4	18.850	0.027	8.667	0.050
3	Setmar	Arhgef4	17.477	0.031	8.283	0.057
4	Slc38a10	Arhgef4	12.567	0.109	8.036	0.144
5	Tnfaip1	Arhgef4	13.888	0.087	8.283	0.119
6	Ttll4	Arhgef4	18.436	0.037	8.999	0.063
7	Elk4	baseline	7.606	0.205	6.194	0.243
8	Setmar	baseline	6.233	0.251	5.648	0.291
9	Slc38a10	baseline	1.324	0.791	5.265	0.806
10	Tnfaip1	baseline	2.645	0.626	5.648	0.648
11	Ttll4	baseline	7.192	0.265	6.641	0.300



12	Setmar	Elk4	-1.373	0.864	8.147	0.869
13	Slc38a10	Elk4	-6.283	0.416	7.880	0.441
14	Tnfaip1	Elk4	-4.962	0.535	8.147	0.554
15	Ttll4	Elk4	-0.414	0.962	8.862	0.963
16	Slc38a10	Setmar	-4.910	0.500	7.454	0.523
17	Tnfaip1	Setmar	-3.589	0.636	7.737	0.651
18	Ttll4	Setmar	0.959	0.909	8.491	0.912
19	Tnfaip1	Slc38a10	1.321	0.856	7.454	0.862
20	Ttll4	Slc38a10	5.869	0.467	8.234	0.490
21	Ttll4	Tnfaip1	4.547	0.586	8.491	0.602

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	11.353	380.176	289	0.071	231.907	0.096
2	HMGU	Elk4	Arhgef4	9.722	341.574	13	0.354	14.704	0.367
3	HMGU	Setmar	Arhgef4	17.350	419.757	15	0.106	16.964	0.114
4	HMGU	Slc38a10	Arhgef4	4.599	221.781	15	0.540	18.638	0.562
5	HMGU	Tnfaip1	Arhgef4	24.939	271.240	15	0.008	18.002	0.009
6	HMGU	Ttll4	Arhgef4	28.875	256.867	11	0.019	12.336	0.020
7	HMGU	Elk4	baseline	-1.631	383.003	284	0.854	284.686	0.860
8	HMGU	Setmar	baseline	5.998	386.814	286	0.426	267.441	0.452
9	HMGU	Slc38a10	baseline	-6.754	376.431	286	0.364	265.253	0.391
10	HMGU	Tnfaip1	baseline	13.586	379.025	286	0.069	265.814	0.086
11	HMGU	Ttll4	baseline	17.523	379.993	282	0.123	293.340	0.132
12	HMGU	Setmar	Elk4	7.628	519.838	10	0.580	10.761	0.586
13	HMGU	Slc38a10	Elk4	-5.123	222.874	10	0.571	11.772	0.585
14	HMGU	Tnfaip1	Elk4	15.217	297.062	10	0.163	11.331	0.171
15	HMGU	Ttll4	Elk4	19.153	287.927	6	0.173	6.534	0.177
16	HMGU	Slc38a10	Setmar	-12.752	340.386	12	0.220	13.662	0.232
17	HMGU	Tnfaip1	Setmar	7.588	402.210	12	0.493	13.408	0.503
18	HMGU	Ttll4	Setmar	11.525	447.932	8	0.453	8.510	0.458
19	HMGU	Tnfaip1	Slc38a10	20.340	154.740	12	0.010	15.589	0.012
20	HMGU	Ttll4	Slc38a10	24.277	76.727	8	0.004	10.986	0.004
21	HMGU	Ttll4	Tnfaip1	3.937	169.462	8	0.673	9.354	0.683
22	ICS	baseline	Arhgef4	3.746	590.470	405	0.686	389.644	0.697
23	ICS	Elk4	Arhgef4	12.215	664.752	12	0.393	12.854	0.400
24	ICS	Setmar	Arhgef4	0.255	1013.557	12	0.988	12.560	0.988
25	ICS	Slc38a10	Arhgef4	0.533	535.120	12	0.966	13.060	0.967
26	ICS	Tnfaip1	Arhgef4	-8.162	479.298	12	0.499	13.183	0.508
27	ICS	Ttll4	Arhgef4	0.379	722.273	12	0.979	12.786	0.980
28	ICS	Elk4	baseline	8.469	589.431	405	0.361	389.506	0.379
29	ICS	Setmar	baseline	-3.491	599.766	405	0.709	390.846	0.719
30	ICS	Slc38a10	baseline	-3.213	585.590	405	0.728	388.990	0.738
31	ICS	Tnfaip1	baseline	-11.908	583.936	405	0.197	388.765	0.214
32	ICS	Ttll4	baseline	-3.367	591.136	405	0.717	389.732	0.727
33	ICS	Setmar	Elk4	-11.960	978.484	12	0.488	12.581	0.493

34	ICS	Slc38a10	Elk4	-11.682	500.046	12	0.348	13.134	0.357
35	ICS	Tnfaip1	Elk4	-20.377	444.224	12	0.096	13.276	0.101
36	ICS	Ttll4	Elk4	-11.836	687.199	12	0.415	12.826	0.421
37	ICS	Slc38a10	Setmar	0.278	848.851	12	0.986	12.669	0.986
38	ICS	Tnfaip1	Setmar	-8.417	793.029	12	0.586	12.716	0.591
39	ICS	Ttll4	Setmar	0.124	1036.004	12	0.994	12.548	0.994
40	ICS	Tnfaip1	Slc38a10	-8.695	314.592	12	0.377	13.797	0.392
41	ICS	Ttll4	Slc38a10	-0.154	557.567	12	0.990	13.018	0.991
42	ICS	Ttll4	Tnfaip1	8.540	501.745	12	0.489	13.130	0.498
43	MRC_Harwell	baseline	Arhgef4	25.123	1367.705	383	0.177	393.333	0.182
44	MRC_Harwell	Elk4	Arhgef4	37.290	439.488	12	0.011	13.054	0.011
45	MRC_Harwell	Setmar	Arhgef4	37.494	544.448	15	0.013	16.133	0.014
46	MRC_Harwell	Slc38a10	Arhgef4	32.427	534.230	20	0.020	21.630	0.021
47	MRC_Harwell	Tnfaip1	Arhgef4	30.400	708.796	15	0.064	15.872	0.067
48	MRC_Harwell	Ttll4	Arhgef4	37.464	511.437	11	0.019	11.806	0.019
49	MRC_Harwell	Elk4	baseline	12.168	1342.686	389	0.301	397.102	0.312
50	MRC_Harwell	Setmar	baseline	12.371	1339.790	392	0.232	391.771	0.246
51	MRC_Harwell	Slc38a10	baseline	7.304	1329.258	397	0.407	374.633	0.426
52	MRC_Harwell	Tnfaip1	baseline	5.277	1346.079	392	0.610	391.977	0.621
53	MRC_Harwell	Ttll4	baseline	12.341	1347.054	388	0.319	397.932	0.330
54	MRC_Harwell	Setmar	Elk4	0.204	316.211	21	0.979	25.728	0.980
55	MRC_Harwell	Slc38a10	Elk4	-4.864	352.243	26	0.517	31.768	0.540
56	MRC_Harwell	Tnfaip1	Elk4	-6.890	433.602	21	0.440	24.534	0.458
57	MRC_Harwell	Ttll4	Elk4	0.173	241.149	17	0.981	21.287	0.982
58	MRC_Harwell	Slc38a10	Setmar	-5.067	415.557	29	0.500	35.279	0.523
59	MRC_Harwell	Tnfaip1	Setmar	-7.094	499.938	24	0.427	27.975	0.445
60	MRC_Harwell	Ttll4	Setmar	-0.031	349.619	20	0.997	23.907	0.997
61	MRC_Harwell	Tnfaip1	Slc38a10	-2.027	500.565	29	0.805	34.356	0.814
62	MRC_Harwell	Ttll4	Slc38a10	5.037	380.410	25	0.533	29.911	0.552
63	MRC_Harwell	Ttll4	Tnfaip1	7.064	472.880	20	0.463	22.938	0.478

### 39 ESLIM\_011\_001\_702.Acoustic.Startle.PPI.Prepulse.inhibition...PP2

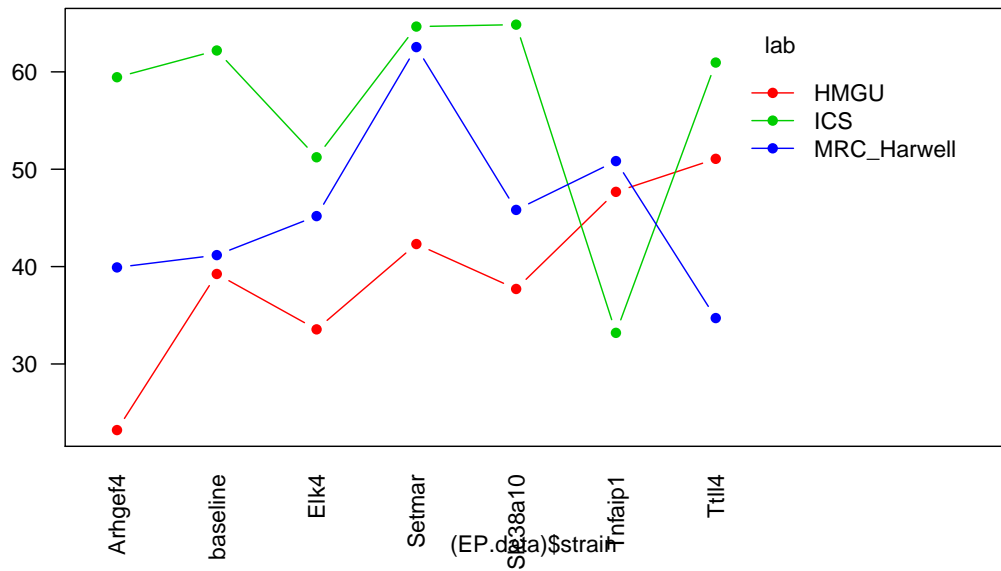
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	5
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

an of ESLIM\_011\_001\_702.Acoustic.Startle.PPI.Prepulse.inhibition.



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	23.20938	23.08989	10
2	Arhgef4	ICS	59.44870	17.93522	7
3	Arhgef4	MRC_Harwell	39.91515	17.93626	4
4	baseline	HMGU	39.24276	17.82410	281
5	baseline	ICS	62.19359	19.51516	400
6	baseline	MRC_Harwell	41.17847	25.48683	381
7	Elk4	HMGU	33.55286	11.62604	5
8	Elk4	ICS	51.22749	27.02203	7
9	Elk4	MRC_Harwell	45.18561	13.11764	10
10	Setmar	HMGU	42.31625	16.15048	7
11	Setmar	ICS	64.64975	21.15450	7
12	Setmar	MRC_Harwell	62.54218	11.39374	13
13	Slc38a10	HMGU	37.70299	12.85971	7
14	Slc38a10	ICS	64.84893	12.43455	7
15	Slc38a10	MRC_Harwell	45.82255	10.59426	18
16	Tnfaip1	HMGU	47.67640	18.39404	7
17	Tnfaip1	ICS	33.19655	35.21471	8
18	Tnfaip1	MRC_Harwell	50.83724	16.60858	13
19	Ttll4	HMGU	51.06690	12.64543	3
20	Ttll4	ICS	60.95431	16.57508	7
21	Ttll4	MRC_Harwell	34.71349	28.97707	9

S2.GxL= 52.18724 S2.GxL/S2.error= 0.11624404

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	5216.820	869.470	1.937	0.072	0.806	0.584
lab	2	122223.835	61111.917	136.120	0.000		
strain:lab	12	13108.834	1092.403	2.433	0.004		
Residuals	1190	534257.401	448.956				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	7.441	0.111	7.618	0.348
2	Elk4	Arhgef4	3.586	0.579	8.893	0.694
3	Setmar	Arhgef4	17.159	0.005	8.678	0.071
4	Slc38a10	Arhgef4	9.030	0.129	8.591	0.314
5	Tnfaip1	Arhgef4	4.214	0.491	8.633	0.634
6	Ttll4	Arhgef4	6.689	0.319	9.149	0.479
7	Elk4	baseline	-3.855	0.398	7.514	0.617
8	Setmar	baseline	9.718	0.019	7.261	0.206
9	Slc38a10	baseline	1.588	0.676	7.151	0.828
10	Tnfaip1	baseline	-3.227	0.426	7.208	0.662
11	Ttll4	baseline	-0.752	0.878	7.806	0.925

12	Setmar	Elk4	13.573	0.026	8.566	0.139
13	Slc38a10	Elk4	5.444	0.354	8.470	0.533
14	Tnfaip1	Elk4	0.628	0.917	8.522	0.942
15	Ttll4	Elk4	3.103	0.640	9.025	0.737
16	Slc38a10	Setmar	-8.129	0.142	8.245	0.344
17	Tnfaip1	Setmar	-12.945	0.024	8.299	0.145
18	Ttll4	Setmar	-10.470	0.099	8.820	0.258
19	Tnfaip1	Slc38a10	-4.816	0.380	8.200	0.568
20	Ttll4	Slc38a10	-2.341	0.703	8.726	0.793
21	Ttll4	Tnfaip1	2.475	0.694	8.776	0.783

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	16.033	324.408	289	0.006	20.878	0.187
2	HMGU	Elk4	Arhgef4	10.343	410.688	13	0.368	24.954	0.499
3	HMGU	Setmar	Arhgef4	19.107	424.221	15	0.079	26.627	0.196
4	HMGU	Slc38a10	Arhgef4	14.494	386.035	15	0.155	26.278	0.313
5	HMGU	Tnfaip1	Arhgef4	24.467	455.222	15	0.034	26.816	0.107
6	HMGU	Ttll4	Arhgef4	27.858	465.282	11	0.076	20.340	0.127
7	HMGU	Elk4	baseline	-5.690	315.128	284	0.478	30.791	0.664
8	HMGU	Setmar	baseline	3.073	316.506	286	0.652	24.816	0.804
9	HMGU	Slc38a10	baseline	-1.540	314.503	286	0.821	24.722	0.901
10	HMGU	Tnfaip1	baseline	8.434	318.132	286	0.218	24.892	0.499
11	HMGU	Ttll4	baseline	11.824	316.580	282	0.253	46.967	0.420
12	HMGU	Setmar	Elk4	8.763	210.569	10	0.327	21.816	0.516
13	HMGU	Slc38a10	Elk4	4.150	153.289	10	0.580	20.799	0.744
14	HMGU	Tnfaip1	Elk4	14.124	257.070	10	0.163	21.999	0.320
15	HMGU	Ttll4	Elk4	17.514	143.412	6	0.092	17.373	0.210
16	HMGU	Slc38a10	Setmar	-4.613	213.105	12	0.565	22.446	0.723
17	HMGU	Tnfaip1	Setmar	5.360	299.589	12	0.573	23.768	0.701
18	HMGU	Ttll4	Setmar	8.751	235.605	8	0.433	18.902	0.559
19	HMGU	Tnfaip1	Slc38a10	9.973	251.856	12	0.263	23.215	0.460
20	HMGU	Ttll4	Slc38a10	13.364	164.006	8	0.169	19.935	0.334
21	HMGU	Ttll4	Tnfaip1	3.391	293.732	8	0.782	17.790	0.831
22	ICS	baseline	Arhgef4	2.745	379.965	405	0.712	27.829	0.830
23	ICS	Elk4	Arhgef4	-8.221	525.931	12	0.515	23.245	0.611
24	ICS	Setmar	Arhgef4	5.201	384.592	12	0.629	23.984	0.725
25	ICS	Slc38a10	Arhgef4	5.400	238.145	12	0.525	22.980	0.685
26	ICS	Tnfaip1	Arhgef4	-26.252	816.197	13	0.099	22.757	0.158
27	ICS	Ttll4	Arhgef4	1.506	298.203	12	0.873	23.757	0.914
28	ICS	Elk4	baseline	-10.966	386.017	405	0.144	28.129	0.394
29	ICS	Setmar	baseline	2.456	381.829	405	0.742	27.921	0.847
30	ICS	Slc38a10	baseline	2.655	377.490	405	0.720	27.707	0.835
31	ICS	Tnfaip1	baseline	-28.997	395.656	406	0.000	26.222	0.028
32	ICS	Ttll4	baseline	-1.239	379.270	405	0.868	27.795	0.923
33	ICS	Setmar	Elk4	13.422	588.851	12	0.321	22.751	0.425

34	ICS	Slc38a10	Elk4	13.621	442.404	12	0.249	23.783	0.379
35	ICS	Tnfaip1	Elk4	-18.031	1004.744	13	0.292	21.531	0.361
36	ICS	Ttll4	Elk4	9.727	502.462	12	0.433	23.415	0.543
37	ICS	Slc38a10	Setmar	0.199	301.065	12	0.983	23.779	0.989
38	ICS	Tnfaip1	Setmar	-31.453	874.278	13	0.061	22.359	0.101
39	ICS	Ttll4	Setmar	-3.695	361.123	12	0.722	23.999	0.800
40	ICS	Tnfaip1	Slc38a10	-31.652	739.095	13	0.042	23.304	0.082
41	ICS	Ttll4	Slc38a10	-3.895	214.676	12	0.628	22.483	0.765
42	ICS	Ttll4	Tnfaip1	27.758	794.533	13	0.079	22.909	0.133
43	MRC_Harwell	baseline	Arhgef4	1.263	647.011	383	0.921	73.375	0.939
44	MRC_Harwell	Elk4	Arhgef4	5.270	209.482	12	0.550	23.289	0.696
45	MRC_Harwell	Setmar	Arhgef4	22.627	168.196	15	0.008	22.892	0.086
46	MRC_Harwell	Slc38a10	Arhgef4	5.907	143.659	20	0.383	21.893	0.632
47	MRC_Harwell	Tnfaip1	Arhgef4	10.922	285.018	15	0.276	26.252	0.444
48	MRC_Harwell	Ttll4	Arhgef4	-5.202	698.408	11	0.749	19.005	0.786
49	MRC_Harwell	Elk4	baseline	4.007	638.531	389	0.621	31.416	0.761
50	MRC_Harwell	Setmar	baseline	21.364	633.668	392	0.003	26.202	0.098
51	MRC_Harwell	Slc38a10	baseline	4.644	626.569	397	0.442	21.766	0.699
52	MRC_Harwell	Tnfaip1	baseline	9.659	638.138	392	0.176	26.320	0.445
53	MRC_Harwell	Ttll4	baseline	-6.465	653.498	388	0.454	34.633	0.632
54	MRC_Harwell	Setmar	Elk4	17.357	147.927	21	0.003	18.121	0.146
55	MRC_Harwell	Slc38a10	Elk4	0.637	132.950	26	0.890	16.920	0.955
56	MRC_Harwell	Tnfaip1	Elk4	5.652	231.371	21	0.387	21.379	0.644
57	MRC_Harwell	Ttll4	Elk4	-10.472	486.236	17	0.316	28.055	0.473
58	MRC_Harwell	Slc38a10	Setmar	-16.720	119.512	29	0.000	15.767	0.147
59	MRC_Harwell	Tnfaip1	Setmar	-11.705	202.831	24	0.047	19.382	0.327
60	MRC_Harwell	Ttll4	Setmar	-27.829	413.759	20	0.005	27.417	0.049
61	MRC_Harwell	Tnfaip1	Slc38a10	5.015	179.938	29	0.313	17.725	0.663
62	MRC_Harwell	Ttll4	Slc38a10	-11.109	345.017	25	0.155	25.194	0.391
63	MRC_Harwell	Ttll4	Tnfaip1	-16.124	501.375	20	0.112	29.183	0.262

## 40 ESLIM\_011\_001\_704.Acoustic.Startle.PPI.Prepulse.inhibition...PP4

count after filtering

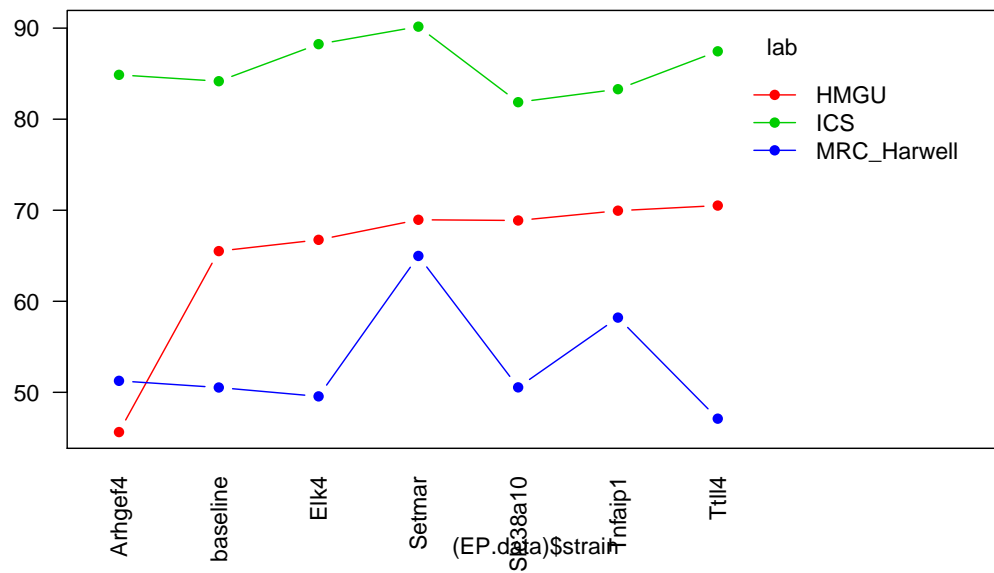
	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	381
7	Elk4	HMGU	5
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



an of ESLIM\_011\_001\_704.Acoustic.Startle.PPI.Prepulse.inhibition.



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	45.63308	16.811879	10
2	Arhgef4	ICS	84.87053	6.484371	7
3	Arhgef4	MRC_Harwell	51.26274	18.150261	4
4	baseline	HMGU	65.51019	12.732723	281
5	baseline	ICS	84.17128	9.635405	400
6	baseline	MRC_Harwell	50.52922	33.222929	381
7	Elk4	HMGU	66.74893	8.361810	5
8	Elk4	ICS	88.24038	5.235493	7
9	Elk4	MRC_Harwell	49.55423	14.354520	10
10	Setmar	HMGU	68.95084	9.849058	7
11	Setmar	ICS	90.16360	1.628506	7
12	Setmar	MRC_Harwell	64.97999	10.640258	13
13	Slc38a10	HMGU	68.87455	7.815879	7
14	Slc38a10	ICS	81.86663	8.504432	7
15	Slc38a10	MRC_Harwell	50.54370	12.697888	18
16	Tnfaip1	HMGU	69.94995	5.131001	7
17	Tnfaip1	ICS	83.29284	4.775743	8
18	Tnfaip1	MRC_Harwell	58.20652	15.846834	13
19	Ttll4	HMGU	70.51113	8.071532	3
20	Ttll4	ICS	87.45521	8.217928	7
21	Ttll4	MRC_Harwell	47.10635	25.487296	9

S2.GxL= 1e-05 S2.GxL/S2.error= 3e-08

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	3066.397	511.066	1.164	0.323	1.739	0.195
lab	2	249193.044	124596.522	283.764	0.000		
strain:lab	12	3657.957	304.830	0.694	0.758		
Residuals	1190	522512.094	439.086				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	8.976	0.052	4.620	0.076
2	Elk4	Arhgef4	10.072	0.115	6.395	0.141
3	Setmar	Arhgef4	18.346	0.003	6.100	0.011
4	Slc38a10	Arhgef4	9.147	0.120	5.896	0.147
5	Tnfaip1	Arhgef4	13.367	0.027	6.052	0.047
6	Ttll4	Arhgef4	9.288	0.162	6.641	0.187
7	Elk4	baseline	1.095	0.808	4.508	0.812
8	Setmar	baseline	9.370	0.022	4.081	0.040
9	Slc38a10	baseline	0.171	0.964	3.763	0.964
10	Tnfaip1	baseline	4.391	0.274	4.008	0.295
11	Ttll4	baseline	0.312	0.949	4.846	0.950

12	Setmar	Elk4	8.274	0.169	6.010	0.194
13	Slc38a10	Elk4	-0.924	0.874	5.796	0.876
14	Tnfaip1	Elk4	3.296	0.581	5.961	0.591
15	Ttll4	Elk4	-0.784	0.905	6.553	0.907
16	Slc38a10	Setmar	-9.198	0.093	5.468	0.118
17	Tnfaip1	Setmar	-4.979	0.379	5.643	0.395
18	Ttll4	Setmar	-9.058	0.149	6.267	0.174
19	Tnfaip1	Slc38a10	4.220	0.437	5.416	0.451
20	Ttll4	Slc38a10	0.140	0.982	6.062	0.982
21	Ttll4	Tnfaip1	-4.079	0.513	6.220	0.524

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	19.877	165.875	289	0.000	289.001	0.000
2	HMGU	Elk4	Arhgef4	21.116	217.187	13	0.021	13.000	0.021
3	HMGU	Setmar	Arhgef4	23.318	208.385	15	0.005	15.000	0.005
4	HMGU	Slc38a10	Arhgef4	23.241	194.019	15	0.004	15.000	0.004
5	HMGU	Tnfaip1	Arhgef4	24.317	180.114	15	0.002	15.000	0.002
6	HMGU	Ttll4	Arhgef4	24.878	243.096	11	0.034	11.000	0.034
7	HMGU	Elk4	baseline	1.239	160.824	284	0.829	284.001	0.829
8	HMGU	Setmar	baseline	3.441	160.756	286	0.479	286.001	0.479
9	HMGU	Slc38a10	baseline	3.364	160.003	286	0.488	286.001	0.488
10	HMGU	Tnfaip1	baseline	4.440	159.273	286	0.359	286.001	0.359
11	HMGU	Ttll4	baseline	5.001	161.434	282	0.498	282.000	0.498
12	HMGU	Setmar	Elk4	2.202	86.170	10	0.694	10.000	0.694
13	HMGU	Slc38a10	Elk4	2.126	64.621	10	0.661	10.000	0.661
14	HMGU	Tnfaip1	Elk4	3.201	43.764	10	0.428	10.000	0.428
15	HMGU	Ttll4	Elk4	3.762	68.330	6	0.556	6.000	0.556
16	HMGU	Slc38a10	Setmar	-0.076	79.046	12	0.987	12.000	0.987
17	HMGU	Tnfaip1	Setmar	0.999	61.666	12	0.816	12.000	0.816
18	HMGU	Ttll4	Setmar	1.560	89.040	8	0.817	8.000	0.817
19	HMGU	Tnfaip1	Slc38a10	1.075	43.708	12	0.766	12.000	0.766
20	HMGU	Ttll4	Slc38a10	1.637	62.103	8	0.771	8.000	0.771
21	HMGU	Ttll4	Tnfaip1	0.561	36.033	8	0.896	8.000	0.896
22	ICS	baseline	Arhgef4	-0.699	92.089	405	0.849	405.002	0.849
23	ICS	Elk4	Arhgef4	3.370	34.729	12	0.306	12.000	0.306
24	ICS	Setmar	Arhgef4	5.293	22.350	12	0.058	12.000	0.058
25	ICS	Slc38a10	Arhgef4	-3.004	57.186	12	0.472	12.000	0.472
26	ICS	Tnfaip1	Arhgef4	-1.578	31.687	13	0.597	13.000	0.597
27	ICS	Ttll4	Arhgef4	2.585	54.791	12	0.526	12.000	0.526
28	ICS	Elk4	baseline	4.069	91.872	405	0.266	405.002	0.266
29	ICS	Setmar	baseline	5.992	91.505	405	0.101	405.002	0.101
30	ICS	Slc38a10	baseline	-2.305	92.537	405	0.530	405.002	0.530
31	ICS	Tnfaip1	baseline	-0.878	91.634	406	0.797	406.002	0.797
32	ICS	Ttll4	baseline	3.284	92.466	405	0.371	405.002	0.371
33	ICS	Setmar	Elk4	1.923	15.031	12	0.372	12.000	0.372

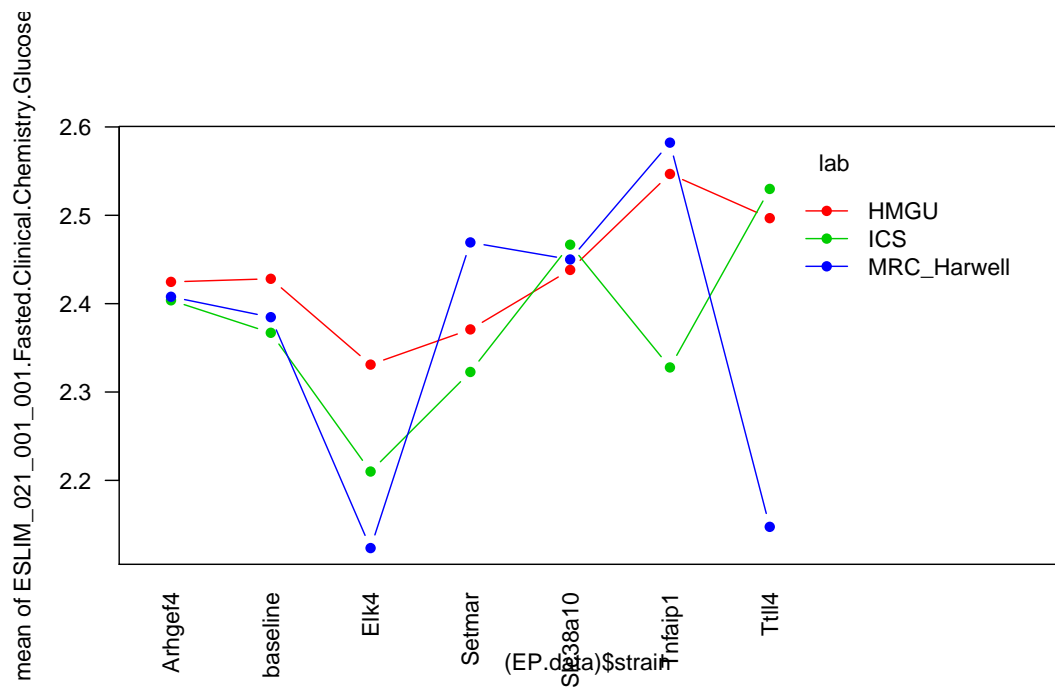
34	ICS	Slc38a10	Elk4	-6.374	49.868	12	0.117	12.000	0.117
35	ICS	Tnfaip1	Elk4	-4.948	24.932	13	0.078	13.000	0.078
36	ICS	Ttll4	Elk4	-0.785	47.472	12	0.835	12.000	0.835
37	ICS	Slc38a10	Setmar	-8.297	37.489	12	0.026	12.000	0.026
38	ICS	Tnfaip1	Setmar	-6.871	13.505	13	0.003	13.000	0.003
39	ICS	Ttll4	Setmar	-2.708	35.093	12	0.409	12.000	0.409
40	ICS	Tnfaip1	Slc38a10	1.426	45.662	13	0.690	13.000	0.690
41	ICS	Ttll4	Slc38a10	5.589	69.930	12	0.235	12.000	0.235
42	ICS	Ttll4	Tnfaip1	4.162	43.451	13	0.244	13.000	0.244
43	MRC_Harwell	baseline	Arhgef4	-0.734	1097.698	383	0.965	383.000	0.965
44	MRC_Harwell	Elk4	Arhgef4	-1.709	236.897	12	0.854	12.000	0.854
45	MRC_Harwell	Setmar	Arhgef4	13.717	156.458	15	0.074	15.000	0.074
46	MRC_Harwell	Slc38a10	Arhgef4	-0.719	186.466	20	0.925	20.000	0.925
47	MRC_Harwell	Tnfaip1	Arhgef4	6.944	266.784	15	0.469	15.000	0.469
48	MRC_Harwell	Ttll4	Arhgef4	-4.156	562.283	11	0.776	11.000	0.776
49	MRC_Harwell	Elk4	baseline	-0.975	1082.993	389	0.926	389.000	0.926
50	MRC_Harwell	Setmar	baseline	14.451	1073.440	392	0.119	392.000	0.119
51	MRC_Harwell	Slc38a10	baseline	0.014	1063.403	397	0.999	397.000	0.999
52	MRC_Harwell	Tnfaip1	baseline	7.677	1077.662	392	0.408	392.000	0.408
53	MRC_Harwell	Ttll4	baseline	-3.423	1094.399	388	0.759	388.000	0.759
54	MRC_Harwell	Setmar	Elk4	15.426	153.002	21	0.007	21.000	0.007
55	MRC_Harwell	Slc38a10	Elk4	0.989	176.750	26	0.852	26.000	0.852
56	MRC_Harwell	Tnfaip1	Elk4	8.652	231.806	21	0.191	21.000	0.191
57	MRC_Harwell	Ttll4	Elk4	-2.448	414.782	17	0.797	17.000	0.797
58	MRC_Harwell	Slc38a10	Setmar	-14.436	141.365	29	0.002	29.000	0.002
59	MRC_Harwell	Tnfaip1	Setmar	-6.773	182.169	24	0.213	24.000	0.213
60	MRC_Harwell	Ttll4	Setmar	-17.874	327.770	20	0.034	20.000	0.034
61	MRC_Harwell	Tnfaip1	Slc38a10	7.663	198.430	29	0.146	29.000	0.146
62	MRC_Harwell	Ttll4	Slc38a10	-3.437	317.513	25	0.641	25.000	0.641
63	MRC_Harwell	Ttll4	Tnfaip1	-11.100	410.514	20	0.221	20.000	0.221

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	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	8
4	baseline	HMGU	165
5	baseline	ICS	461
6	baseline	MRC_Harwell	340
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	5
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	10
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	8
21	Ttll4	MRC_Harwell	12

## Animals dropped

	strain	lab	n
1	Aldh2	ICS	7
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	2.424652	0.1741018	7
2	Arhgef4	ICS	2.403782	0.1333126	10
3	Arhgef4	MRC_Harwell	2.407792	0.1885479	8
4	baseline	HMGU	2.428141	0.2470446	165
5	baseline	ICS	2.367019	0.2480681	461
6	baseline	MRC_Harwell	2.384717	0.2426493	340
7	Elk4	HMGU	2.331023	0.2079959	11
8	Elk4	ICS	2.210001	0.2568117	7
9	Elk4	MRC_Harwell	2.123373	0.1490804	7
10	Setmar	HMGU	2.370868	0.2449818	7
11	Setmar	ICS	2.322706	0.2596542	10
12	Setmar	MRC_Harwell	2.469310	0.1961126	13
13	Slc38a10	HMGU	2.438198	0.2651460	12
14	Slc38a10	ICS	2.466743	0.2268045	5
15	Slc38a10	MRC_Harwell	2.450012	0.1528103	9
16	Tnfaip1	HMGU	2.546759	0.1405632	7
17	Tnfaip1	ICS	2.327827	0.2964259	10
18	Tnfaip1	MRC_Harwell	2.582236	0.1794020	13
19	Ttll4	HMGU	2.496760	0.2169535	4
20	Ttll4	ICS	2.529843	0.3926526	8
21	Ttll4	MRC_Harwell	2.147411	0.1808759	12

S2.GxL= 0.00488 S2.GxL/S2.error= 0.08253942

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	1.048	0.175	2.957	0.007	1.671	0.211
lab	2	0.559	0.280	4.734	0.009		
strain:lab	12	1.447	0.121	2.041	0.018		
Residuals	1105	65.299	0.059				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.019	0.706	0.076	0.810
2	Elk4	Arhgef4	-0.180	0.009	0.090	0.068
3	Setmar	Arhgef4	-0.019	0.777	0.088	0.835
4	Slc38a10	Arhgef4	0.038	0.579	0.090	0.680
5	Tnfaip1	Arhgef4	0.075	0.255	0.088	0.408
6	Ttll4	Arhgef4	-0.055	0.428	0.091	0.556
7	Elk4	baseline	-0.161	0.001	0.076	0.055
8	Setmar	baseline	-0.000	0.998	0.073	0.999
9	Slc38a10	baseline	0.056	0.243	0.076	0.470
10	Tnfaip1	baseline	0.094	0.038	0.073	0.225
11	Ttll4	baseline	-0.037	0.467	0.077	0.645

12	Setmar	Elk4	0.161	0.014	0.088	0.091
13	Slc38a10	Elk4	0.218	0.001	0.090	0.032
14	Tnfaip1	Elk4	0.255	0.000	0.088	0.013
15	Ttll4	Elk4	0.125	0.073	0.091	0.196
16	Slc38a10	Setmar	0.056	0.386	0.088	0.531
17	Tnfaip1	Setmar	0.094	0.136	0.085	0.295
18	Ttll4	Setmar	-0.036	0.584	0.089	0.689
19	Tnfaip1	Slc38a10	0.037	0.568	0.088	0.678
20	Ttll4	Slc38a10	-0.093	0.177	0.091	0.327
21	Ttll4	Tnfaip1	-0.130	0.051	0.089	0.169

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.003	0.060	170	0.971	41.527	0.980
2	HMGU	Elk4	Arhgef4	-0.094	0.038	16	0.338	27.057	0.500
3	HMGU	Setmar	Arhgef4	-0.054	0.045	12	0.644	23.548	0.724
4	HMGU	Slc38a10	Arhgef4	0.014	0.056	17	0.906	28.949	0.929
5	HMGU	Tnfaip1	Arhgef4	0.122	0.025	12	0.174	23.442	0.357
6	HMGU	Ttll4	Arhgef4	0.072	0.036	9	0.559	18.960	0.646
7	HMGU	Elk4	baseline	-0.097	0.060	174	0.205	29.837	0.443
8	HMGU	Setmar	baseline	-0.057	0.061	170	0.549	42.141	0.679
9	HMGU	Slc38a10	baseline	0.010	0.062	175	0.892	28.732	0.936
10	HMGU	Tnfaip1	baseline	0.119	0.060	170	0.210	41.309	0.390
11	HMGU	Ttll4	baseline	0.069	0.061	167	0.583	68.284	0.668
12	HMGU	Setmar	Elk4	0.040	0.050	16	0.716	27.905	0.787
13	HMGU	Slc38a10	Elk4	0.107	0.057	21	0.296	30.747	0.452
14	HMGU	Tnfaip1	Elk4	0.216	0.034	16	0.029	26.459	0.118
15	HMGU	Ttll4	Elk4	0.166	0.044	13	0.200	24.272	0.303
16	HMGU	Slc38a10	Setmar	0.067	0.067	17	0.591	28.948	0.672
17	HMGU	Tnfaip1	Setmar	0.176	0.040	12	0.125	23.858	0.238
18	HMGU	Ttll4	Setmar	0.126	0.056	9	0.417	16.377	0.489
19	HMGU	Tnfaip1	Slc38a10	0.109	0.052	17	0.333	28.832	0.466
20	HMGU	Ttll4	Slc38a10	0.059	0.065	14	0.697	23.789	0.744
21	HMGU	Ttll4	Tnfaip1	-0.050	0.029	9	0.650	20.032	0.734
22	ICS	baseline	Arhgef4	-0.037	0.061	469	0.641	31.758	0.773
23	ICS	Elk4	Arhgef4	-0.194	0.037	15	0.059	26.383	0.169
24	ICS	Setmar	Arhgef4	-0.081	0.043	18	0.391	27.911	0.554
25	ICS	Slc38a10	Arhgef4	0.063	0.028	13	0.505	24.686	0.645
26	ICS	Tnfaip1	Arhgef4	-0.076	0.053	18	0.469	29.215	0.598
27	ICS	Ttll4	Arhgef4	0.126	0.077	16	0.354	27.459	0.451
28	ICS	Elk4	baseline	-0.157	0.062	466	0.097	43.076	0.257
29	ICS	Setmar	baseline	-0.044	0.062	469	0.577	32.136	0.729
30	ICS	Slc38a10	baseline	0.100	0.061	464	0.371	59.479	0.506
31	ICS	Tnfaip1	baseline	-0.039	0.062	469	0.623	32.293	0.759
32	ICS	Ttll4	baseline	0.163	0.063	467	0.069	39.059	0.229
33	ICS	Setmar	Elk4	0.113	0.067	15	0.390	26.491	0.491



34	ICS	Slc38a10	Elk4	0.257	0.060	10	0.104	18.293	0.158
35	ICS	Tnfaip1	Elk4	0.118	0.079	15	0.409	25.793	0.495
36	ICS	Ttll4	Elk4	0.320	0.113	13	0.090	20.412	0.126
37	ICS	Slc38a10	Setmar	0.144	0.063	13	0.312	23.237	0.402
38	ICS	Tnfaip1	Setmar	0.005	0.078	18	0.968	29.976	0.975
39	ICS	Ttll4	Setmar	0.207	0.105	16	0.197	26.010	0.268
40	ICS	Tnfaip1	Slc38a10	-0.139	0.077	13	0.376	22.071	0.451
41	ICS	Ttll4	Slc38a10	0.063	0.117	11	0.752	16.391	0.776
42	ICS	Ttll4	Tnfaip1	0.202	0.117	16	0.231	25.415	0.297
43	MRC_Harwell	baseline	Arhgef4	-0.023	0.058	346	0.790	36.654	0.861
44	MRC_Harwell	Elk4	Arhgef4	-0.284	0.029	13	0.007	24.470	0.042
45	MRC_Harwell	Setmar	Arhgef4	0.062	0.037	19	0.488	27.390	0.644
46	MRC_Harwell	Slc38a10	Arhgef4	0.042	0.029	15	0.618	24.936	0.746
47	MRC_Harwell	Tnfaip1	Arhgef4	0.174	0.033	19	0.047	26.367	0.186
48	MRC_Harwell	Ttll4	Arhgef4	-0.260	0.034	18	0.006	26.402	0.055
49	MRC_Harwell	Elk4	baseline	-0.261	0.058	345	0.005	40.876	0.060
50	MRC_Harwell	Setmar	baseline	0.085	0.058	351	0.215	25.939	0.487
51	MRC_Harwell	Slc38a10	baseline	0.065	0.058	347	0.423	33.269	0.613
52	MRC_Harwell	Tnfaip1	baseline	0.198	0.058	351	0.004	25.879	0.112
53	MRC_Harwell	Ttll4	baseline	-0.237	0.058	350	0.001	27.225	0.061
54	MRC_Harwell	Setmar	Elk4	0.346	0.033	18	0.001	26.660	0.013
55	MRC_Harwell	Slc38a10	Elk4	0.327	0.023	14	0.001	23.420	0.015
56	MRC_Harwell	Tnfaip1	Elk4	0.459	0.029	18	0.000	25.487	0.001
57	MRC_Harwell	Ttll4	Elk4	0.024	0.029	17	0.770	25.440	0.852
58	MRC_Harwell	Slc38a10	Setmar	-0.019	0.032	20	0.807	25.660	0.879
59	MRC_Harwell	Tnfaip1	Setmar	0.113	0.035	24	0.139	25.176	0.368
60	MRC_Harwell	Ttll4	Setmar	-0.322	0.036	23	0.000	25.602	0.016
61	MRC_Harwell	Tnfaip1	Slc38a10	0.132	0.029	20	0.087	24.434	0.293
62	MRC_Harwell	Ttll4	Slc38a10	-0.303	0.029	19	0.001	24.593	0.022
63	MRC_Harwell	Ttll4	Tnfaip1	-0.435	0.032	23	0.000	24.550	0.002

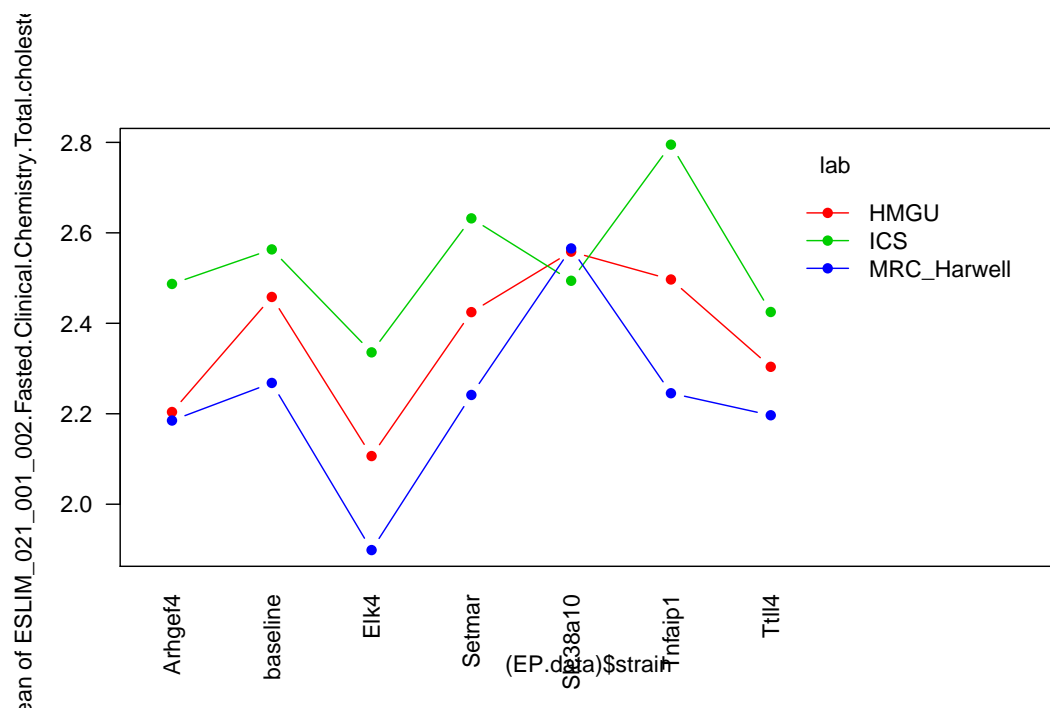
## 42 ESLIM\_021\_001\_002.Fasted.Clinical.Chemistry.Total.cholesterol...

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	8
4	baseline	HMGU	165
5	baseline	ICS	462
6	baseline	MRC_Harwell	339
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	5
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	10
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	8
21	Ttll4	MRC_Harwell	12

Animals dropped

	strain	lab	n
1	Aldh2	ICS	7
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	2.203857	0.29986854	7
2	Arhgef4	ICS	2.487000	0.17537579	10
3	Arhgef4	MRC_Harwell	2.185000	0.24945655	8
4	baseline	HMGU	2.458224	0.35563763	165
5	baseline	ICS	2.563377	0.32572806	462
6	baseline	MRC_Harwell	2.268112	0.26743905	339
7	Elk4	HMGU	2.106455	0.26709113	11
8	Elk4	ICS	2.335714	0.26893972	7
9	Elk4	MRC_Harwell	1.898571	0.20424075	7
10	Setmar	HMGU	2.424714	0.23932246	7
11	Setmar	ICS	2.632000	0.28365864	10
12	Setmar	MRC_Harwell	2.241538	0.31015711	13
13	Slc38a10	HMGU	2.558333	0.28492657	12
14	Slc38a10	ICS	2.494000	0.21407942	5
15	Slc38a10	MRC_Harwell	2.565556	0.23612026	9
16	Tnfaip1	HMGU	2.496857	0.19981194	7
17	Tnfaip1	ICS	2.795000	0.29923049	10
18	Tnfaip1	MRC_Harwell	2.245385	0.12059681	13
19	Ttll4	HMGU	2.303750	0.19678139	4
20	Ttll4	ICS	2.425000	0.08502101	8
21	Ttll4	MRC_Harwell	2.196667	0.18632002	12

S2.GxL= 0 S2.GxL/S2.error= 2e-08

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	3.944	0.657	7.122	0.000	6.933	0.002
lab	2	19.985	9.993	108.262	0.000		
strain:lab	12	1.142	0.095	1.031	0.417		
Residuals	1105	101.992	0.092				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.127	0.040	0.062	0.062
2	Elk4	Arhgef4	-0.191	0.026	0.086	0.046
3	Setmar	Arhgef4	0.131	0.111	0.082	0.137
4	Slc38a10	Arhgef4	0.267	0.002	0.085	0.009
5	Tnfaip1	Arhgef4	0.204	0.013	0.082	0.029
6	Ttll4	Arhgef4	0.019	0.824	0.087	0.828
7	Elk4	baseline	-0.318	0.000	0.062	0.000
8	Setmar	baseline	0.005	0.936	0.056	0.937
9	Slc38a10	baseline	0.140	0.020	0.061	0.040
10	Tnfaip1	baseline	0.077	0.170	0.056	0.195
11	Ttll4	baseline	-0.108	0.087	0.063	0.113

12	Setmar	Elk4	0.323	0.000	0.082	0.002
13	Slc38a10	Elk4	0.458	0.000	0.085	0.000
14	Tnfaip1	Elk4	0.395	0.000	0.082	0.000
15	Ttll4	Elk4	0.211	0.015	0.087	0.032
16	Slc38a10	Setmar	0.136	0.096	0.082	0.122
17	Tnfaip1	Setmar	0.073	0.353	0.078	0.372
18	Ttll4	Setmar	-0.112	0.178	0.083	0.203
19	Tnfaip1	Slc38a10	-0.063	0.441	0.082	0.457
20	Ttll4	Slc38a10	-0.248	0.004	0.086	0.014
21	Ttll4	Tnfaip1	-0.185	0.026	0.083	0.046

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.254	0.125	170	0.064	170.000	0.064
2	HMGU	Elk4	Arhgef4	-0.097	0.078	16	0.482	16.000	0.482
3	HMGU	Setmar	Arhgef4	0.221	0.074	12	0.154	12.000	0.154
4	HMGU	Slc38a10	Arhgef4	0.354	0.084	17	0.020	17.000	0.020
5	HMGU	Tnfaip1	Arhgef4	0.293	0.065	12	0.053	12.000	0.053
6	HMGU	Ttll4	Arhgef4	0.100	0.073	9	0.569	9.000	0.569
7	HMGU	Elk4	baseline	-0.352	0.123	174	0.002	174.000	0.002
8	HMGU	Setmar	baseline	-0.034	0.124	170	0.806	170.000	0.806
9	HMGU	Slc38a10	baseline	0.100	0.124	175	0.342	175.000	0.342
10	HMGU	Tnfaip1	baseline	0.039	0.123	170	0.776	170.000	0.776
11	HMGU	Ttll4	baseline	-0.154	0.125	167	0.389	167.000	0.389
12	HMGU	Setmar	Elk4	0.318	0.066	16	0.021	16.000	0.021
13	HMGU	Slc38a10	Elk4	0.452	0.076	21	0.001	21.000	0.001
14	HMGU	Tnfaip1	Elk4	0.390	0.060	16	0.004	16.000	0.004
15	HMGU	Ttll4	Elk4	0.197	0.064	13	0.204	13.000	0.204
16	HMGU	Slc38a10	Setmar	0.134	0.073	17	0.312	17.000	0.312
17	HMGU	Tnfaip1	Setmar	0.072	0.049	12	0.552	12.000	0.552
18	HMGU	Ttll4	Setmar	-0.121	0.051	9	0.415	9.000	0.415
19	HMGU	Tnfaip1	Slc38a10	-0.061	0.067	17	0.623	17.000	0.623
20	HMGU	Ttll4	Slc38a10	-0.255	0.072	14	0.123	14.000	0.123
21	HMGU	Ttll4	Tnfaip1	-0.193	0.040	9	0.156	9.000	0.156
22	ICS	baseline	Arhgef4	0.076	0.105	470	0.460	470.000	0.460
23	ICS	Elk4	Arhgef4	-0.151	0.047	15	0.179	15.000	0.179
24	ICS	Setmar	Arhgef4	0.145	0.056	18	0.186	18.000	0.186
25	ICS	Slc38a10	Arhgef4	0.007	0.035	13	0.947	13.000	0.947
26	ICS	Tnfaip1	Arhgef4	0.308	0.060	18	0.012	18.000	0.012
27	ICS	Ttll4	Arhgef4	-0.062	0.020	16	0.374	16.000	0.374
28	ICS	Elk4	baseline	-0.228	0.106	467	0.067	467.000	0.067
29	ICS	Setmar	baseline	0.069	0.106	470	0.509	470.000	0.509
30	ICS	Slc38a10	baseline	-0.069	0.106	465	0.635	465.000	0.635
31	ICS	Tnfaip1	baseline	0.232	0.106	470	0.026	470.000	0.026
32	ICS	Ttll4	baseline	-0.138	0.105	468	0.231	468.000	0.231
33	ICS	Setmar	Elk4	0.296	0.077	15	0.047	15.000	0.047

34	ICS	Slc38a10	Elk4	0.158	0.062	10	0.302	10.000	0.302
35	ICS	Tnfaip1	Elk4	0.459	0.083	15	0.005	15.000	0.005
36	ICS	Ttll4	Elk4	0.089	0.037	13	0.388	13.000	0.388
37	ICS	Slc38a10	Setmar	-0.138	0.070	13	0.358	13.000	0.358
38	ICS	Tnfaip1	Setmar	0.163	0.085	18	0.227	18.000	0.227
39	ICS	Ttll4	Setmar	-0.207	0.048	16	0.065	16.000	0.065
40	ICS	Tnfaip1	Slc38a10	0.301	0.076	13	0.068	13.000	0.068
41	ICS	Ttll4	Slc38a10	-0.069	0.021	11	0.424	11.000	0.424
42	ICS	Ttll4	Tnfaip1	-0.370	0.054	16	0.004	16.000	0.004
43	MRC_Harwell	baseline	Arhgef4	0.083	0.071	345	0.385	345.000	0.385
44	MRC_Harwell	Elk4	Arhgef4	-0.286	0.053	13	0.032	13.000	0.032
45	MRC_Harwell	Setmar	Arhgef4	0.057	0.084	19	0.669	19.000	0.669
46	MRC_Harwell	Slc38a10	Arhgef4	0.381	0.059	15	0.006	15.000	0.006
47	MRC_Harwell	Tnfaip1	Arhgef4	0.060	0.032	19	0.463	19.000	0.463
48	MRC_Harwell	Ttll4	Arhgef4	0.012	0.045	18	0.906	18.000	0.906
49	MRC_Harwell	Elk4	baseline	-0.370	0.071	344	0.000	344.000	0.000
50	MRC_Harwell	Setmar	baseline	-0.027	0.072	350	0.727	350.000	0.727
51	MRC_Harwell	Slc38a10	baseline	0.297	0.071	346	0.001	346.000	0.001
52	MRC_Harwell	Tnfaip1	baseline	-0.023	0.070	350	0.761	350.000	0.761
53	MRC_Harwell	Ttll4	baseline	-0.071	0.070	349	0.360	349.000	0.360
54	MRC_Harwell	Setmar	Elk4	0.343	0.078	18	0.017	18.000	0.017
55	MRC_Harwell	Slc38a10	Elk4	0.667	0.050	14	0.000	14.000	0.000
56	MRC_Harwell	Tnfaip1	Elk4	0.347	0.024	18	0.000	18.000	0.000
57	MRC_Harwell	Ttll4	Elk4	0.298	0.037	17	0.005	17.000	0.005
58	MRC_Harwell	Slc38a10	Setmar	0.324	0.080	20	0.016	20.000	0.016
59	MRC_Harwell	Tnfaip1	Setmar	0.004	0.055	24	0.967	24.000	0.967
60	MRC_Harwell	Ttll4	Setmar	-0.045	0.067	23	0.669	23.000	0.669
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.320	0.031	20	0.000	20.000	0.000
62	MRC_Harwell	Ttll4	Slc38a10	-0.369	0.044	19	0.001	19.000	0.001
63	MRC_Harwell	Ttll4	Tnfaip1	-0.049	0.024	23	0.442	23.000	0.442

# 43    ESLIM\_\_021\_\_001\_\_003.Fasted.Clinical.Chemistry.Triglycerides count after filtering

strain	lab	n
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## Animals dropped

	strain	lab	n
1	Aldh2	ICS	7
2	Arhgef4	HMGU	7
3	Arhgef4	ICS	10
4	baseline	HMGU	165
5	baseline	ICS	460
6	Elk4	HMGU	11
7	Elk4	ICS	7
8	Entpd1	ICS	9
9	Setmar	HMGU	7
10	Setmar	ICS	10
11	Slc38a10	HMGU	12
12	Slc38a10	ICS	5
13	Sytl1	ICS	8
14	Tnfaip1	HMGU	7
15	Tnfaip1	ICS	10
16	Ttll4	HMGU	4
17	Ttll4	ICS	8

## 44 ESLIM\_021\_001\_004.Fasted.Clinical.Chemistry.Free.fatty.acids..

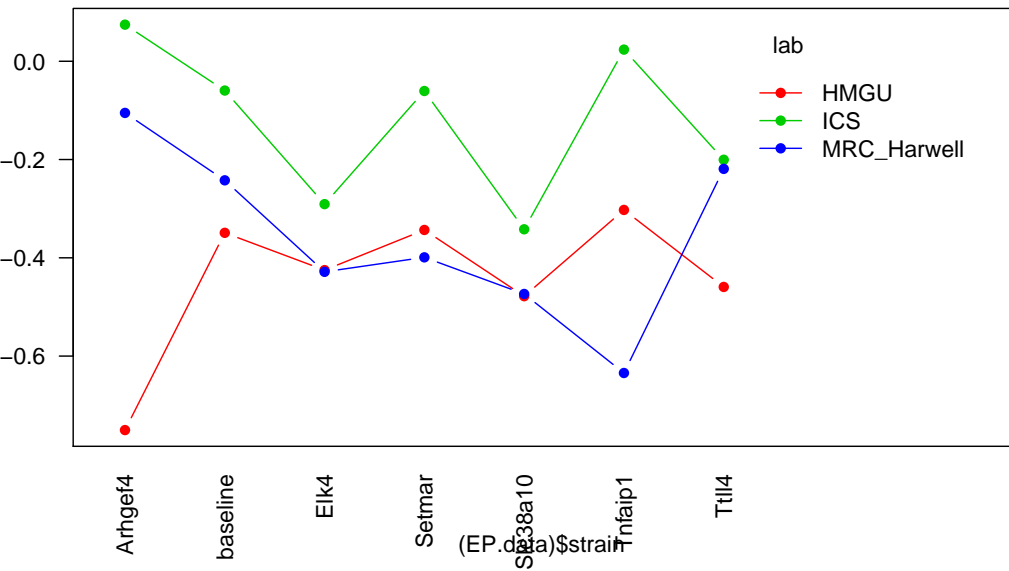
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	8
4	baseline	HMGU	165
5	baseline	ICS	459
6	baseline	MRC_Harwell	332
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	7
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	5
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	10
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	8
21	Ttll4	MRC_Harwell	12

Animals dropped

	strain	lab	n
1	Aldh2	ICS	7
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	-0.75063153	0.2452111	7
2	Arhgef4	ICS	0.07452836	0.2535766	10
3	Arhgef4	MRC_Harwell	-0.10509737	0.1974009	8
4	baseline	HMGU	-0.34917213	0.2053971	165
5	baseline	ICS	-0.05959499	0.2194652	459
6	baseline	MRC_Harwell	-0.24232950	0.2767540	332
7	Elk4	HMGU	-0.42510051	0.1347868	11
8	Elk4	ICS	-0.29078347	0.2077358	7
9	Elk4	MRC_Harwell	-0.42851749	0.1617476	7
10	Setmar	HMGU	-0.34332343	0.1239973	7
11	Setmar	ICS	-0.06054826	0.2769407	10
12	Setmar	MRC_Harwell	-0.39908242	0.1912598	13
13	Slc38a10	HMGU	-0.47811931	0.2489373	12
14	Slc38a10	ICS	-0.34198009	0.1851080	5
15	Slc38a10	MRC_Harwell	-0.47363145	0.1409843	9
16	Tnfaip1	HMGU	-0.30257148	0.1316890	7
17	Tnfaip1	ICS	0.02373991	0.2281639	10
18	Tnfaip1	MRC_Harwell	-0.63443764	0.1786977	13
19	Ttll4	HMGU	-0.45931912	0.2111907	4
20	Ttll4	ICS	-0.20046703	0.1065820	8
21	Ttll4	MRC_Harwell	-0.21896530	0.2272556	12

S2.GxL= 0.02457 S2.GxL/S2.error= 0.44779361

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	3.975	0.662	12.074	0.000	0.546	0.764
lab	2	15.556	7.778	141.770	0.000		
strain:lab	12	3.531	0.294	5.363	0.000		
Residuals	1095	60.077	0.055				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.037	0.436	0.137	0.791
2	Elk4	Arhgef4	-0.125	0.059	0.145	0.403
3	Setmar	Arhgef4	-0.016	0.802	0.143	0.914
4	Slc38a10	Arhgef4	-0.173	0.009	0.145	0.256
5	Tnfaip1	Arhgef4	-0.058	0.365	0.143	0.695
6	Ttll4	Arhgef4	-0.032	0.628	0.146	0.828
7	Elk4	baseline	-0.162	0.001	0.137	0.259
8	Setmar	baseline	-0.053	0.224	0.136	0.703
9	Slc38a10	baseline	-0.210	0.000	0.137	0.152
10	Tnfaip1	baseline	-0.094	0.030	0.136	0.499
11	Ttll4	baseline	-0.069	0.152	0.138	0.625

12	Setmar	Elk4	0.109	0.085	0.144	0.460
13	Slc38a10	Elk4	-0.048	0.469	0.145	0.749
14	Tnfaip1	Elk4	0.068	0.285	0.144	0.645
15	Ttll4	Elk4	0.093	0.165	0.146	0.537
16	Slc38a10	Setmar	-0.157	0.013	0.144	0.296
17	Tnfaip1	Setmar	-0.042	0.492	0.142	0.775
18	Ttll4	Setmar	-0.017	0.796	0.145	0.911
19	Tnfaip1	Slc38a10	0.115	0.066	0.144	0.438
20	Ttll4	Slc38a10	0.140	0.034	0.146	0.356
21	Ttll4	Tnfaip1	0.025	0.696	0.145	0.866

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.401	0.043	170	0.000	15.298	0.109
2	HMGU	Elk4	Arhgef4	0.326	0.034	16	0.002	15.873	0.192
3	HMGU	Setmar	Arhgef4	0.407	0.038	12	0.002	17.025	0.114
4	HMGU	Slc38a10	Arhgef4	0.273	0.061	17	0.033	18.679	0.291
5	HMGU	Tnfaip1	Arhgef4	0.448	0.039	12	0.001	17.144	0.085
6	HMGU	Ttll4	Arhgef4	0.291	0.055	9	0.079	19.771	0.287
7	HMGU	Elk4	baseline	-0.076	0.041	174	0.229	14.004	0.747
8	HMGU	Setmar	baseline	0.006	0.041	170	0.941	15.170	0.980
9	HMGU	Slc38a10	baseline	-0.129	0.043	175	0.040	13.965	0.584
10	HMGU	Tnfaip1	baseline	0.047	0.041	170	0.553	15.175	0.846
11	HMGU	Ttll4	baseline	-0.110	0.042	167	0.291	17.800	0.658
12	HMGU	Setmar	Elk4	0.082	0.017	16	0.214	13.964	0.728
13	HMGU	Slc38a10	Elk4	-0.053	0.041	21	0.538	15.564	0.826
14	HMGU	Tnfaip1	Elk4	0.123	0.018	16	0.076	14.049	0.604
15	HMGU	Ttll4	Elk4	-0.034	0.024	13	0.713	15.962	0.888
16	HMGU	Slc38a10	Setmar	-0.135	0.046	17	0.202	17.028	0.588
17	HMGU	Tnfaip1	Setmar	0.041	0.016	12	0.562	14.262	0.863
18	HMGU	Ttll4	Setmar	-0.116	0.025	9	0.273	16.420	0.639
19	HMGU	Tnfaip1	Slc38a10	0.176	0.046	17	0.104	17.102	0.482
20	HMGU	Ttll4	Slc38a10	0.019	0.058	14	0.895	20.599	0.943
21	HMGU	Ttll4	Tnfaip1	-0.157	0.026	9	0.158	16.617	0.529
22	ICS	baseline	Arhgef4	-0.134	0.048	467	0.057	14.537	0.573
23	ICS	Elk4	Arhgef4	-0.365	0.056	15	0.007	18.414	0.161
24	ICS	Setmar	Arhgef4	-0.135	0.070	18	0.270	18.839	0.597
25	ICS	Slc38a10	Arhgef4	-0.417	0.055	13	0.006	19.399	0.120
26	ICS	Tnfaip1	Arhgef4	-0.051	0.058	18	0.643	17.694	0.839
27	ICS	Ttll4	Arhgef4	-0.275	0.041	16	0.011	16.507	0.271
28	ICS	Elk4	baseline	-0.231	0.048	464	0.006	15.640	0.344
29	ICS	Setmar	baseline	-0.001	0.049	467	0.989	14.550	0.997
30	ICS	Slc38a10	baseline	-0.282	0.048	462	0.004	17.195	0.260
31	ICS	Tnfaip1	baseline	0.083	0.048	467	0.236	14.524	0.725
32	ICS	Ttll4	baseline	-0.141	0.048	465	0.071	15.133	0.558
33	ICS	Setmar	Elk4	0.230	0.063	15	0.083	19.178	0.376

34	ICS	Slc38a10	Elk4	-0.051	0.040	10	0.670	17.906	0.840
35	ICS	Tnfaip1	Elk4	0.315	0.048	15	0.011	17.631	0.219
36	ICS	Ttll4	Elk4	0.090	0.026	13	0.299	15.361	0.708
37	ICS	Slc38a10	Setmar	-0.281	0.064	13	0.063	20.305	0.294
38	ICS	Tnfaip1	Setmar	0.084	0.064	18	0.467	18.275	0.739
39	ICS	Ttll4	Setmar	-0.140	0.048	16	0.197	17.241	0.575
40	ICS	Tnfaip1	Slc38a10	0.366	0.047	13	0.009	18.420	0.162
41	ICS	Ttll4	Slc38a10	0.142	0.020	11	0.105	15.050	0.557
42	ICS	Ttll4	Tnfaip1	-0.224	0.034	16	0.021	15.768	0.361
43	MRC_Harwell	baseline	Arhgef4	-0.137	0.076	338	0.165	17.183	0.579
44	MRC_Harwell	Elk4	Arhgef4	-0.323	0.033	13	0.004	16.227	0.198
45	MRC_Harwell	Setmar	Arhgef4	-0.294	0.037	19	0.003	15.742	0.235
46	MRC_Harwell	Slc38a10	Arhgef4	-0.369	0.029	15	0.000	15.314	0.140
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.529	0.035	19	0.000	15.449	0.041
48	MRC_Harwell	Ttll4	Arhgef4	-0.114	0.047	18	0.263	16.784	0.645
49	MRC_Harwell	Elk4	baseline	-0.186	0.076	337	0.077	17.965	0.458
50	MRC_Harwell	Setmar	baseline	-0.157	0.075	343	0.044	15.107	0.515
51	MRC_Harwell	Slc38a10	baseline	-0.231	0.075	339	0.013	16.542	0.350
52	MRC_Harwell	Tnfaip1	baseline	-0.392	0.075	343	0.000	15.100	0.116
53	MRC_Harwell	Ttll4	baseline	0.023	0.076	342	0.773	15.399	0.922
54	MRC_Harwell	Setmar	Elk4	0.029	0.033	18	0.734	15.588	0.903
55	MRC_Harwell	Slc38a10	Elk4	-0.045	0.023	14	0.561	14.790	0.850
56	MRC_Harwell	Tnfaip1	Elk4	-0.206	0.030	18	0.021	15.254	0.397
57	MRC_Harwell	Ttll4	Elk4	0.210	0.043	17	0.048	16.719	0.400
58	MRC_Harwell	Slc38a10	Setmar	-0.075	0.030	20	0.332	14.786	0.755
59	MRC_Harwell	Tnfaip1	Setmar	-0.235	0.034	24	0.003	14.627	0.329
60	MRC_Harwell	Ttll4	Setmar	0.180	0.044	23	0.042	15.506	0.459
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.161	0.027	20	0.036	14.525	0.501
62	MRC_Harwell	Ttll4	Slc38a10	0.255	0.038	19	0.008	15.682	0.301
63	MRC_Harwell	Ttll4	Tnfaip1	0.415	0.041	23	0.000	15.310	0.099

## 45 ESLIM\_021\_001\_005.Fasted.Clinical.Chemistry.HDL.cholesterol....

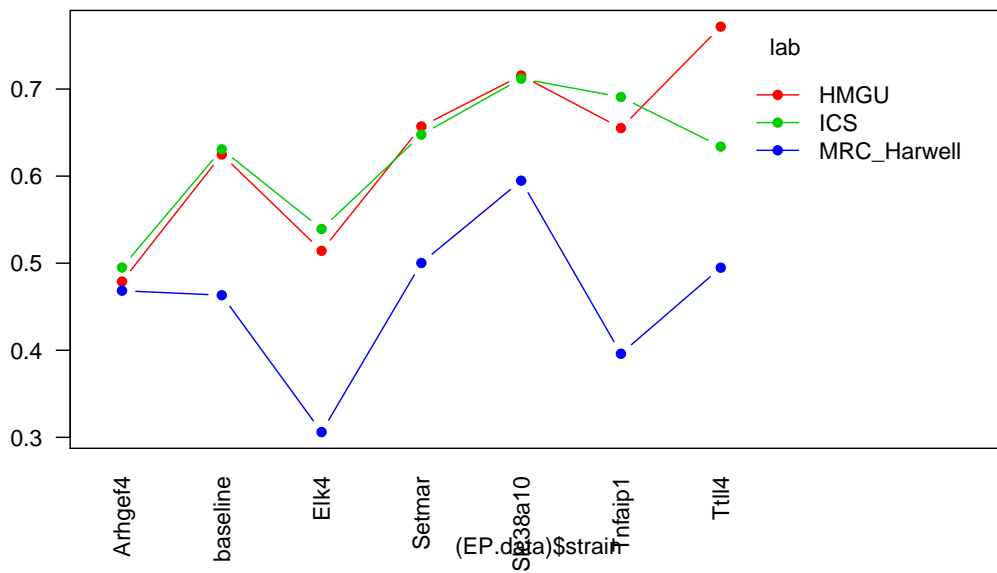
count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	8
4	baseline	HMGU	165
5	baseline	ICS	462
6	baseline	MRC_Harwell	293
7	Elk4	HMGU	11
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	4
10	Setmar	HMGU	7
11	Setmar	ICS	10
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	12
14	Slc38a10	ICS	5
15	Slc38a10	MRC_Harwell	9
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	10
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	4
20	Ttll4	ICS	8
21	Ttll4	MRC_Harwell	12

Animals dropped

	strain	lab	n
1	Aldh2	ICS	7
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

ian of ESLIM\_021\_001\_005.Fasted.Clinical.Chemistry.HDL.choleste



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	0.4789065	0.19620314	7
2	Arhgef4	ICS	0.4950607	0.06745728	10
3	Arhgef4	MRC_Harwell	0.4683899	0.16909949	8
4	baseline	HMGU	0.6248071	0.15910063	165
5	baseline	ICS	0.6308366	0.14459885	462
6	baseline	MRC_Harwell	0.4632225	0.13780536	293
7	Elk4	HMGU	0.5141576	0.12952509	11
8	Elk4	ICS	0.5392677	0.16713549	7
9	Elk4	MRC_Harwell	0.3060242	0.15277197	4
10	Setmar	HMGU	0.6570402	0.10290786	7
11	Setmar	ICS	0.6475810	0.07552059	10
12	Setmar	MRC_Harwell	0.5002414	0.12007616	13
13	Slc38a10	HMGU	0.7154863	0.17878263	12
14	Slc38a10	ICS	0.7119281	0.09944273	5
15	Slc38a10	MRC_Harwell	0.5947521	0.11691230	9
16	Tnfaip1	HMGU	0.6551398	0.09050823	7
17	Tnfaip1	ICS	0.6908287	0.10396101	10
18	Tnfaip1	MRC_Harwell	0.3959993	0.07041569	13
19	Ttll4	HMGU	0.7716544	0.06945685	4
20	Ttll4	ICS	0.6338932	0.04006297	8
21	Ttll4	MRC_Harwell	0.4947893	0.07952233	12

S2.GxL= 0 S2.GxL/S2.error= 1e-08

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.668	0.111	5.519	0.000	6.909	0.002
lab	2	6.464	3.232	160.226	0.000		
strain:lab	12	0.298	0.025	1.232	0.255		
Residuals	1056	21.303	0.020				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.094	0.001	0.029	0.007
2	Elk4	Arhgef4	-0.020	0.638	0.042	0.647
3	Setmar	Arhgef4	0.123	0.001	0.039	0.008
4	Slc38a10	Arhgef4	0.196	0.000	0.040	0.000
5	Tnfaip1	Arhgef4	0.091	0.018	0.039	0.035
6	Ttll4	Arhgef4	0.135	0.001	0.041	0.006
7	Elk4	baseline	-0.113	0.000	0.031	0.003
8	Setmar	baseline	0.029	0.272	0.026	0.295
9	Slc38a10	baseline	0.103	0.000	0.028	0.004
10	Tnfaip1	baseline	-0.002	0.932	0.026	0.933
11	Ttll4	baseline	0.041	0.163	0.029	0.189

12	Setmar	Elk4	0.142	0.000	0.040	0.004
13	Slc38a10	Elk4	0.216	0.000	0.041	0.000
14	Tnfaip1	Elk4	0.111	0.006	0.040	0.017
15	Ttll4	Elk4	0.154	0.000	0.042	0.003
16	Slc38a10	Setmar	0.074	0.053	0.038	0.077
17	Tnfaip1	Setmar	-0.031	0.395	0.037	0.412
18	Ttll4	Setmar	0.012	0.756	0.039	0.761
19	Tnfaip1	Slc38a10	-0.105	0.006	0.038	0.018
20	Ttll4	Slc38a10	-0.062	0.126	0.040	0.153
21	Ttll4	Tnfaip1	0.043	0.266	0.039	0.288

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.146	0.026	170	0.020	170.000	0.020
2	HMGU	Elk4	Arhgef4	0.035	0.025	16	0.650	16.000	0.650
3	HMGU	Setmar	Arhgef4	0.178	0.025	12	0.055	12.000	0.055
4	HMGU	Slc38a10	Arhgef4	0.237	0.034	17	0.016	17.000	0.016
5	HMGU	Tnfaip1	Arhgef4	0.176	0.023	12	0.052	12.000	0.052
6	HMGU	Ttll4	Arhgef4	0.293	0.027	9	0.020	9.000	0.020
7	HMGU	Elk4	baseline	-0.111	0.025	174	0.025	174.000	0.025
8	HMGU	Setmar	baseline	0.032	0.025	170	0.596	170.000	0.596
9	HMGU	Slc38a10	baseline	0.091	0.026	175	0.060	175.000	0.060
10	HMGU	Tnfaip1	baseline	0.030	0.025	170	0.618	170.000	0.618
11	HMGU	Ttll4	baseline	0.147	0.025	167	0.068	167.000	0.068
12	HMGU	Setmar	Elk4	0.143	0.014	16	0.026	16.000	0.026
13	HMGU	Slc38a10	Elk4	0.201	0.025	21	0.006	21.000	0.006
14	HMGU	Tnfaip1	Elk4	0.141	0.014	16	0.023	16.000	0.023
15	HMGU	Ttll4	Elk4	0.257	0.014	13	0.003	13.000	0.003
16	HMGU	Slc38a10	Setmar	0.058	0.024	17	0.442	17.000	0.442
17	HMGU	Tnfaip1	Setmar	-0.002	0.009	12	0.971	12.000	0.971
18	HMGU	Ttll4	Setmar	0.115	0.009	9	0.081	9.000	0.081
19	HMGU	Tnfaip1	Slc38a10	-0.060	0.024	17	0.420	17.000	0.420
20	HMGU	Ttll4	Slc38a10	0.056	0.026	14	0.557	14.000	0.557
21	HMGU	Ttll4	Tnfaip1	0.117	0.007	9	0.054	9.000	0.054
22	ICS	baseline	Arhgef4	0.136	0.021	470	0.003	470.000	0.003
23	ICS	Elk4	Arhgef4	0.044	0.014	15	0.459	15.000	0.459
24	ICS	Setmar	Arhgef4	0.153	0.005	18	0.000	18.000	0.000
25	ICS	Slc38a10	Arhgef4	0.217	0.006	13	0.000	13.000	0.000
26	ICS	Tnfaip1	Arhgef4	0.196	0.008	18	0.000	18.000	0.000
27	ICS	Ttll4	Arhgef4	0.139	0.003	16	0.000	16.000	0.000
28	ICS	Elk4	baseline	-0.092	0.021	467	0.098	467.000	0.098
29	ICS	Setmar	baseline	0.017	0.021	470	0.715	470.000	0.715
30	ICS	Slc38a10	baseline	0.081	0.021	465	0.212	465.000	0.212
31	ICS	Tnfaip1	baseline	0.060	0.021	470	0.193	470.000	0.193
32	ICS	Ttll4	baseline	0.003	0.021	468	0.952	468.000	0.952
33	ICS	Setmar	Elk4	0.108	0.015	15	0.089	15.000	0.089



34	ICS	Slc38a10	Elk4	0.173	0.021	10	0.068	10.000	0.068
35	ICS	Tnfaip1	Elk4	0.152	0.018	15	0.035	15.000	0.035
36	ICS	Ttll4	Elk4	0.095	0.014	13	0.143	13.000	0.143
37	ICS	Slc38a10	Setmar	0.064	0.007	13	0.183	13.000	0.183
38	ICS	Tnfaip1	Setmar	0.043	0.008	18	0.301	18.000	0.301
39	ICS	Ttll4	Setmar	-0.014	0.004	16	0.651	16.000	0.651
40	ICS	Tnfaip1	Slc38a10	-0.021	0.011	13	0.713	13.000	0.713
41	ICS	Ttll4	Slc38a10	-0.078	0.005	11	0.069	11.000	0.069
42	ICS	Ttll4	Tnfaip1	-0.057	0.007	16	0.164	16.000	0.164
43	MRC_Harwell	baseline	Arhgef4	-0.005	0.019	299	0.917	299.000	0.917
44	MRC_Harwell	Elk4	Arhgef4	-0.162	0.027	10	0.138	10.000	0.138
45	MRC_Harwell	Setmar	Arhgef4	0.032	0.020	19	0.619	19.000	0.619
46	MRC_Harwell	Slc38a10	Arhgef4	0.126	0.021	15	0.090	15.000	0.090
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.072	0.014	19	0.184	19.000	0.184
48	MRC_Harwell	Ttll4	Arhgef4	0.026	0.015	18	0.642	18.000	0.642
49	MRC_Harwell	Elk4	baseline	-0.157	0.019	295	0.024	295.000	0.024
50	MRC_Harwell	Setmar	baseline	0.037	0.019	304	0.342	304.000	0.342
51	MRC_Harwell	Slc38a10	baseline	0.132	0.019	300	0.005	300.000	0.005
52	MRC_Harwell	Tnfaip1	baseline	-0.067	0.018	304	0.082	304.000	0.082
53	MRC_Harwell	Ttll4	baseline	0.032	0.019	303	0.432	303.000	0.432
54	MRC_Harwell	Setmar	Elk4	0.194	0.016	15	0.018	15.000	0.018
55	MRC_Harwell	Slc38a10	Elk4	0.289	0.016	11	0.003	11.000	0.003
56	MRC_Harwell	Tnfaip1	Elk4	0.090	0.009	15	0.111	15.000	0.111
57	MRC_Harwell	Ttll4	Elk4	0.189	0.010	14	0.006	14.000	0.006
58	MRC_Harwell	Slc38a10	Setmar	0.095	0.014	20	0.082	20.000	0.082
59	MRC_Harwell	Tnfaip1	Setmar	-0.104	0.010	24	0.013	24.000	0.013
60	MRC_Harwell	Ttll4	Setmar	-0.005	0.011	23	0.896	23.000	0.896
61	MRC_Harwell	Tnfaip1	Slc38a10	-0.199	0.008	20	0.000	20.000	0.000
62	MRC_Harwell	Ttll4	Slc38a10	-0.100	0.009	19	0.031	19.000	0.031
63	MRC_Harwell	Ttll4	Tnfaip1	0.099	0.006	23	0.003	23.000	0.003

46    **ESLIM\_\_021\_\_001\_\_006.Fasted.Clinical.Chemistry.LDL.cholesterol**  
count after filtering

strain	lab	n
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**Animals dropped**

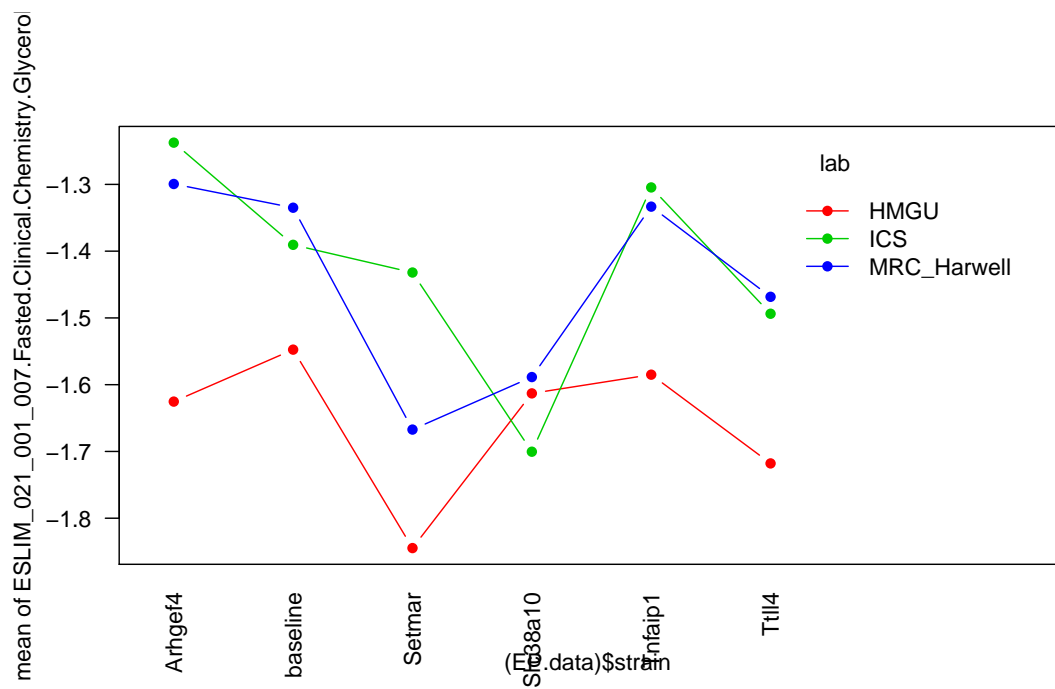
	strain	lab	n
1	Arhgef4	HMGU	7
2	baseline	HMGU	165
3	baseline	MRC_Harwell	49
4	Elk4	HMGU	11
5	Setmar	HMGU	7
6	Slc38a10	HMGU	12
7	Tnfaip1	HMGU	7
8	Tnfaip1	MRC_Harwell	10
9	Ttll4	HMGU	4

## 47 ESLIM\_021\_001\_007.Fasted.Clinical.Chemistry.Glycerol count after filtering

	strain	lab	n
1	Arhgef4	HMGU	7
2	Arhgef4	ICS	10
3	Arhgef4	MRC_Harwell	8
4	baseline	HMGU	165
5	baseline	ICS	460
6	baseline	MRC_Harwell	289
7	Setmar	HMGU	7
8	Setmar	ICS	10
9	Setmar	MRC_Harwell	13
10	Slc38a10	HMGU	12
11	Slc38a10	ICS	5
12	Slc38a10	MRC_Harwell	9
13	Tnfaip1	HMGU	7
14	Tnfaip1	ICS	10
15	Tnfaip1	MRC_Harwell	13
16	Ttll4	HMGU	4
17	Ttll4	ICS	8
18	Ttll4	MRC_Harwell	12

## Animals dropped

	strain	lab	n
1	Aldh2	ICS	7
2	Aldh2	MRC_Harwell	11
3	Elk4	HMGU	11
4	Elk4	ICS	7
5	Entpd1	ICS	9
6	Entpd1	MRC_Harwell	10
7	Sytl1	ICS	8



## Strains Included

Arhgef4	Setmar	Tnfaip1
baseline	Slc38a10	Ttll4

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	-1.625344	0.1741933	7
2	Arhgef4	ICS	-1.237471	0.2242931	10
3	Arhgef4	MRC_Harwell	-1.299391	0.2426671	8
4	baseline	HMGU	-1.547511	0.2023013	165
5	baseline	ICS	-1.390518	0.2392597	460
6	baseline	MRC_Harwell	-1.334948	0.2537069	289
7	Setmar	HMGU	-1.844751	0.1183775	7
8	Setmar	ICS	-1.432014	0.2353385	10
9	Setmar	MRC_Harwell	-1.667269	0.1650673	13
10	Slc38a10	HMGU	-1.613023	0.1925869	12
11	Slc38a10	ICS	-1.700411	0.1096500	5
12	Slc38a10	MRC_Harwell	-1.588600	0.1465606	9
13	Tnfaip1	HMGU	-1.585003	0.1403561	7
14	Tnfaip1	ICS	-1.304553	0.2397174	10
15	Tnfaip1	MRC_Harwell	-1.333342	0.1657505	13
16	Ttll4	HMGU	-1.717925	0.1240253	4
17	Ttll4	ICS	-1.493763	0.1218934	8
18	Ttll4	MRC_Harwell	-1.468391	0.2052117	12

S2.GxL= 0.00317 S2.GxL/S2.error= 0.05872973

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	5	3.018	0.604	11.175	0.000	4.788	0.017
lab	2	5.793	2.896	53.623	0.000		
strain:lab	10	1.080	0.108	1.999	0.030		
Residuals	1031	55.688	0.054				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	-0.045	0.344	0.066	0.515
2	Setmar	Arhgef4	-0.267	0.000	0.078	0.007
3	Slc38a10	Arhgef4	-0.228	0.000	0.081	0.018
4	Tnfaip1	Arhgef4	-0.023	0.718	0.078	0.778
5	Ttll4	Arhgef4	-0.172	0.010	0.082	0.062
6	Setmar	baseline	-0.222	0.000	0.064	0.006
7	Slc38a10	baseline	-0.183	0.000	0.066	0.020
8	Tnfaip1	baseline	0.022	0.612	0.064	0.738
9	Ttll4	baseline	-0.127	0.008	0.068	0.090
10	Slc38a10	Setmar	0.039	0.527	0.079	0.627
11	Tnfaip1	Setmar	0.244	0.000	0.076	0.009
12	Ttll4	Setmar	0.095	0.134	0.080	0.258
13	Tnfaip1	Slc38a10	0.205	0.001	0.079	0.026
14	Ttll4	Slc38a10	0.056	0.394	0.082	0.510

15	Ttll4	Tnfaip1	-0.149	0.020	0.080	0.091
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	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.078	0.041	170	0.318	36.144	0.489
2	HMGU	Setmar	Arhgef4	-0.219	0.022	12	0.017	21.814	0.064
3	HMGU	Slc38a10	Arhgef4	0.012	0.035	17	0.891	26.334	0.918
4	HMGU	Tnfaip1	Arhgef4	0.040	0.025	12	0.642	21.978	0.732
5	HMGU	Ttll4	Arhgef4	-0.093	0.025	9	0.378	17.669	0.478
6	HMGU	Setmar	baseline	-0.297	0.040	170	0.000	35.695	0.011
7	HMGU	Slc38a10	baseline	-0.066	0.041	175	0.279	24.281	0.518
8	HMGU	Tnfaip1	baseline	-0.037	0.040	170	0.629	35.851	0.738
9	HMGU	Ttll4	baseline	-0.170	0.040	167	0.096	59.742	0.192
10	HMGU	Slc38a10	Setmar	0.232	0.029	17	0.011	25.381	0.052
11	HMGU	Tnfaip1	Setmar	0.260	0.017	12	0.003	20.902	0.023
12	HMGU	Ttll4	Setmar	0.127	0.014	9	0.127	19.000	0.262
13	HMGU	Tnfaip1	Slc38a10	0.028	0.031	17	0.742	25.776	0.810
14	HMGU	Ttll4	Slc38a10	-0.105	0.032	14	0.330	23.787	0.431
15	HMGU	Ttll4	Tnfaip1	-0.133	0.018	9	0.151	18.757	0.267
16	ICS	baseline	Arhgef4	-0.153	0.057	468	0.046	36.173	0.174
17	ICS	Setmar	Arhgef4	-0.195	0.053	18	0.075	27.960	0.146
18	ICS	Slc38a10	Arhgef4	-0.463	0.039	13	0.001	22.413	0.002
19	ICS	Tnfaip1	Arhgef4	-0.067	0.054	18	0.526	27.977	0.612
20	ICS	Ttll4	Arhgef4	-0.256	0.035	16	0.011	25.569	0.041
21	ICS	Setmar	baseline	-0.041	0.057	468	0.588	36.230	0.709
22	ICS	Slc38a10	baseline	-0.310	0.057	463	0.004	73.755	0.023
23	ICS	Tnfaip1	baseline	0.086	0.057	468	0.262	36.253	0.441
24	ICS	Ttll4	baseline	-0.103	0.057	466	0.224	44.308	0.380
25	ICS	Slc38a10	Setmar	-0.268	0.042	13	0.033	22.102	0.064
26	ICS	Tnfaip1	Setmar	0.127	0.056	18	0.246	27.999	0.345
27	ICS	Ttll4	Setmar	-0.062	0.038	16	0.512	25.791	0.616
28	ICS	Tnfaip1	Slc38a10	0.396	0.043	13	0.004	21.969	0.009
29	ICS	Ttll4	Slc38a10	0.207	0.014	11	0.010	20.039	0.061
30	ICS	Ttll4	Tnfaip1	-0.189	0.039	16	0.060	25.856	0.136
31	MRC_Harwell	baseline	Arhgef4	-0.036	0.064	295	0.696	50.017	0.770
32	MRC_Harwell	Setmar	Arhgef4	-0.368	0.039	19	0.001	27.719	0.005
33	MRC_Harwell	Slc38a10	Arhgef4	-0.289	0.039	15	0.009	24.992	0.029
34	MRC_Harwell	Tnfaip1	Arhgef4	-0.034	0.039	19	0.706	27.741	0.778
35	MRC_Harwell	Ttll4	Arhgef4	-0.169	0.049	18	0.110	27.904	0.199
36	MRC_Harwell	Setmar	baseline	-0.332	0.063	300	0.000	31.591	0.004
37	MRC_Harwell	Slc38a10	baseline	-0.254	0.063	296	0.003	43.889	0.035
38	MRC_Harwell	Tnfaip1	baseline	0.002	0.063	300	0.982	31.595	0.988
39	MRC_Harwell	Ttll4	baseline	-0.133	0.064	299	0.073	34.059	0.229
40	MRC_Harwell	Slc38a10	Setmar	0.079	0.025	20	0.264	23.749	0.461
41	MRC_Harwell	Tnfaip1	Setmar	0.334	0.027	24	0.000	23.373	0.003
42	MRC_Harwell	Ttll4	Setmar	0.199	0.034	23	0.013	26.272	0.079

43	MRC_Harwell	Tnfaip1	Slc38a10	0.255	0.025	20	0.001	23.803	0.023
44	MRC_Harwell	Ttl4	Slc38a10	0.120	0.033	19	0.152	26.394	0.299
45	MRC_Harwell	Ttl4	Tnfaip1	-0.135	0.034	23	0.082	26.312	0.226

48    **ESLIM\_\_022\_\_001\_\_001.Body.Weight.Body.Weight**

count after filtering

strain	lab	n
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**Animals dropped**

	strain	lab	n
1	Arhgef4	HMGU	7
2	baseline	HMGU	301
3	Elk4	HMGU	11
4	Setmar	HMGU	7
5	Slc38a10	HMGU	12
6	Tnfaip1	HMGU	7
7	Ttll4	HMGU	4



## 49 ESLIM\_022\_001\_709.Body.Weight.Grip.Strength.Body.Weight count after filtering

	strain	lab	n
1	Arhgef4	HMGU	9
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	304
5	baseline	ICS	403
6	baseline	MRC_Harwell	392
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	11
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

## Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.181699	0.03395719	9
2	Arhgef4	ICS	3.161551	0.07007091	7
3	Arhgef4	MRC_Harwell	3.271654	0.08870477	4
4	baseline	HMGU	3.195250	0.09971932	304
5	baseline	ICS	3.169542	0.07573305	403
6	baseline	MRC_Harwell	3.248617	0.06972711	392
7	Elk4	HMGU	3.104608	0.06656945	7
8	Elk4	ICS	3.081251	0.10360451	7
9	Elk4	MRC_Harwell	3.183648	0.05636840	10
10	Setmar	HMGU	3.122588	0.04920362	7
11	Setmar	ICS	3.210535	0.04524149	7
12	Setmar	MRC_Harwell	3.232214	0.05984874	13
13	Slc38a10	HMGU	2.984793	0.06109673	7
14	Slc38a10	ICS	3.086642	0.03436461	7
15	Slc38a10	MRC_Harwell	3.101996	0.08916737	19
16	Tnfaip1	HMGU	3.130228	0.04623126	7
17	Tnfaip1	ICS	3.142013	0.06067404	8
18	Tnfaip1	MRC_Harwell	3.239756	0.06702204	11
19	Ttll4	HMGU	3.222859	0.08994979	3
20	Ttll4	ICS	3.084716	0.07445613	7
21	Ttll4	MRC_Harwell	3.238502	0.07512202	10

S2.GxL= 0.00038 S2.GxL/S2.error= 0.05913491

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.682	0.114	17.825	0.000	9.151	0.001
lab	2	1.510	0.755	118.442	0.000		
strain:lab	12	0.153	0.013	2.004	0.021		
Residuals	1228	7.828	0.006				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.001	0.937	0.024	0.954
2	Elk4	Arhgef4	-0.079	0.001	0.029	0.019
3	Setmar	Arhgef4	-0.015	0.513	0.029	0.602
4	Slc38a10	Arhgef4	-0.146	0.000	0.028	0.000
5	Tnfaip1	Arhgef4	-0.030	0.200	0.029	0.312
6	Ttll4	Arhgef4	-0.032	0.211	0.031	0.321
7	Elk4	baseline	-0.080	0.000	0.023	0.004
8	Setmar	baseline	-0.017	0.279	0.022	0.467
9	Slc38a10	baseline	-0.148	0.000	0.022	0.000
10	Tnfaip1	baseline	-0.032	0.044	0.023	0.182
11	Ttll4	baseline	-0.033	0.067	0.024	0.203

12	Setmar	Elk4	0.064	0.005	0.028	0.040
13	Slc38a10	Elk4	-0.067	0.002	0.027	0.028
14	Tnfaip1	Elk4	0.048	0.032	0.028	0.106
15	Ttll4	Elk4	0.047	0.050	0.029	0.132
16	Slc38a10	Setmar	-0.131	0.000	0.027	0.000
17	Tnfaip1	Setmar	-0.015	0.493	0.027	0.592
18	Ttll4	Setmar	-0.016	0.493	0.029	0.586
19	Tnfaip1	Slc38a10	0.116	0.000	0.027	0.001
20	Ttll4	Slc38a10	0.115	0.000	0.028	0.002
21	Ttll4	Tnfaip1	-0.001	0.962	0.029	0.970

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.014	0.010	311	0.685	67.637	0.755
2	HMGU	Elk4	Arhgef4	-0.077	0.003	14	0.009	25.407	0.050
3	HMGU	Setmar	Arhgef4	-0.059	0.002	14	0.013	23.138	0.100
4	HMGU	Slc38a10	Arhgef4	-0.197	0.002	14	0.000	24.857	0.000
5	HMGU	Tnfaip1	Arhgef4	-0.051	0.002	14	0.022	22.631	0.144
6	HMGU	Ttll4	Arhgef4	0.041	0.003	10	0.249	20.290	0.354
7	HMGU	Elk4	baseline	-0.091	0.010	309	0.017	88.639	0.056
8	HMGU	Setmar	baseline	-0.073	0.010	309	0.056	88.265	0.124
9	HMGU	Slc38a10	baseline	-0.210	0.010	309	0.000	88.509	0.000
10	HMGU	Tnfaip1	baseline	-0.065	0.010	309	0.087	88.212	0.168
11	HMGU	Ttll4	baseline	0.028	0.010	305	0.633	199.470	0.667
12	HMGU	Setmar	Elk4	0.018	0.003	12	0.576	23.609	0.670
13	HMGU	Slc38a10	Elk4	-0.120	0.004	12	0.004	22.952	0.012
14	HMGU	Tnfaip1	Elk4	0.026	0.003	12	0.419	23.724	0.540
15	HMGU	Ttll4	Elk4	0.118	0.005	8	0.047	12.707	0.061
16	HMGU	Slc38a10	Setmar	-0.138	0.003	12	0.001	23.864	0.002
17	HMGU	Tnfaip1	Setmar	0.008	0.002	12	0.770	23.868	0.840
18	HMGU	Ttll4	Setmar	0.100	0.004	8	0.047	14.347	0.068
19	HMGU	Tnfaip1	Slc38a10	0.145	0.003	12	0.000	23.935	0.001
20	HMGU	Ttll4	Slc38a10	0.238	0.005	8	0.001	13.180	0.001
21	HMGU	Ttll4	Tnfaip1	0.093	0.004	8	0.056	14.662	0.083
22	ICS	baseline	Arhgef4	0.008	0.006	408	0.782	51.140	0.842
23	ICS	Elk4	Arhgef4	-0.080	0.008	12	0.115	19.282	0.158
24	ICS	Setmar	Arhgef4	0.049	0.003	12	0.146	23.563	0.253
25	ICS	Slc38a10	Arhgef4	-0.075	0.003	12	0.026	23.882	0.076
26	ICS	Tnfaip1	Arhgef4	-0.020	0.004	13	0.572	24.360	0.657
27	ICS	Ttll4	Arhgef4	-0.077	0.005	12	0.070	21.668	0.120
28	ICS	Elk4	baseline	-0.088	0.006	408	0.003	51.891	0.032
29	ICS	Setmar	baseline	0.041	0.006	408	0.154	50.772	0.307
30	ICS	Slc38a10	baseline	-0.083	0.006	408	0.004	50.661	0.042
31	ICS	Tnfaip1	baseline	-0.028	0.006	409	0.308	44.960	0.478
32	ICS	Ttll4	baseline	-0.085	0.006	408	0.003	51.221	0.038
33	ICS	Setmar	Elk4	0.129	0.006	12	0.011	20.480	0.019

34	ICS	Slc38a10	Elk4	0.005	0.006	12	0.898	20.900	0.914
35	ICS	Tnfaip1	Elk4	0.061	0.007	13	0.182	21.815	0.247
36	ICS	Ttll4	Elk4	0.003	0.008	12	0.944	19.054	0.951
37	ICS	Slc38a10	Setmar	-0.124	0.002	12	0.000	22.672	0.002
38	ICS	Tnfaip1	Setmar	-0.069	0.003	13	0.029	24.988	0.093
39	ICS	Ttll4	Setmar	-0.126	0.004	12	0.002	23.258	0.007
40	ICS	Tnfaip1	Slc38a10	0.055	0.003	13	0.053	24.776	0.156
41	ICS	Ttll4	Slc38a10	-0.002	0.003	12	0.951	23.662	0.963
42	ICS	Ttll4	Tnfaip1	-0.057	0.005	13	0.124	24.095	0.209
43	MRC_Harwell	baseline	Arhgef4	-0.023	0.005	394	0.512	76.924	0.607
44	MRC_Harwell	Elk4	Arhgef4	-0.088	0.004	12	0.044	21.557	0.079
45	MRC_Harwell	Setmar	Arhgef4	-0.039	0.004	15	0.317	25.907	0.409
46	MRC_Harwell	Slc38a10	Arhgef4	-0.170	0.008	21	0.002	30.932	0.005
47	MRC_Harwell	Tnfaip1	Arhgef4	-0.032	0.005	13	0.465	22.015	0.534
48	MRC_Harwell	Ttll4	Arhgef4	-0.033	0.006	12	0.490	19.454	0.547
49	MRC_Harwell	Elk4	baseline	-0.065	0.005	400	0.004	32.439	0.075
50	MRC_Harwell	Setmar	baseline	-0.016	0.005	403	0.403	27.058	0.631
51	MRC_Harwell	Slc38a10	baseline	-0.147	0.005	409	0.000	22.271	0.000
52	MRC_Harwell	Tnfaip1	baseline	-0.009	0.005	401	0.678	30.400	0.801
53	MRC_Harwell	Ttll4	baseline	-0.010	0.005	400	0.651	32.725	0.777
54	MRC_Harwell	Setmar	Elk4	0.049	0.003	21	0.061	28.444	0.198
55	MRC_Harwell	Slc38a10	Elk4	-0.082	0.006	27	0.014	36.133	0.057
56	MRC_Harwell	Tnfaip1	Elk4	0.056	0.004	19	0.053	29.266	0.157
57	MRC_Harwell	Ttll4	Elk4	0.055	0.004	18	0.081	29.536	0.186
58	MRC_Harwell	Slc38a10	Setmar	-0.130	0.006	30	0.000	35.181	0.002
59	MRC_Harwell	Tnfaip1	Setmar	0.008	0.004	22	0.774	29.904	0.843
60	MRC_Harwell	Ttll4	Setmar	0.006	0.004	21	0.825	30.905	0.874
61	MRC_Harwell	Tnfaip1	Slc38a10	0.138	0.007	28	0.000	36.611	0.002
62	MRC_Harwell	Ttll4	Slc38a10	0.137	0.007	27	0.000	37.239	0.003
63	MRC_Harwell	Ttll4	Tnfaip1	-0.001	0.005	19	0.968	30.638	0.976

## 50 ESLIM\_\_022\_\_001\_\_710.Body.Weight.Rotarod.Body.Weight

count after filtering

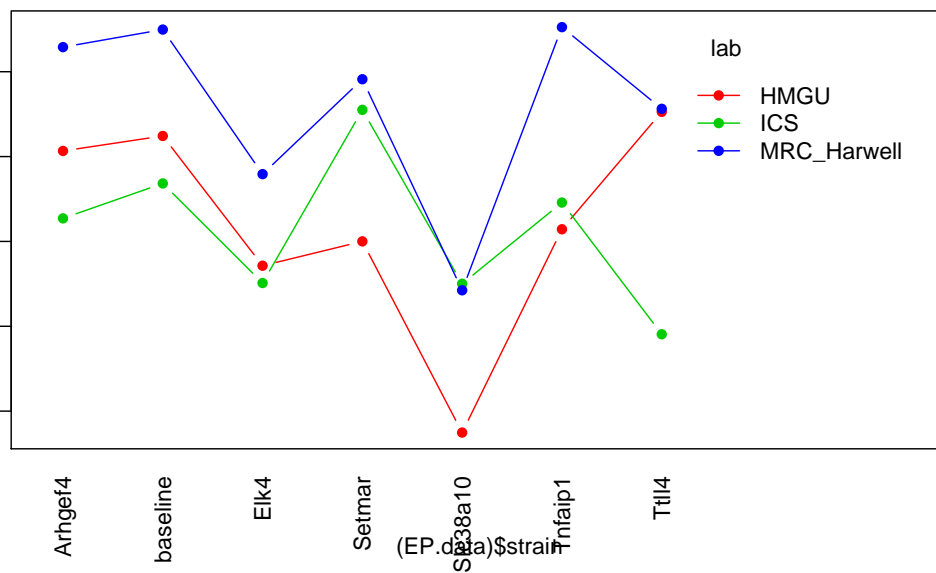
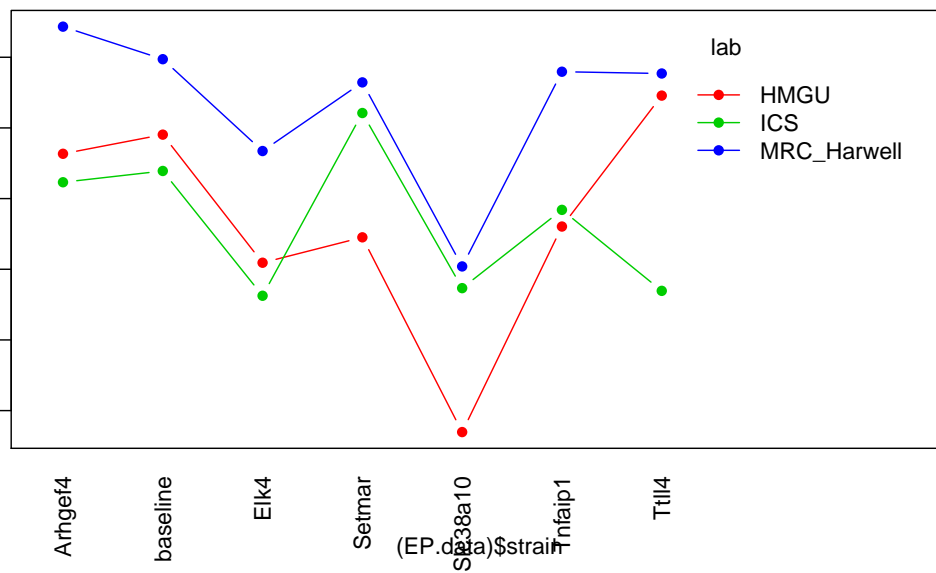
	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	295
5	baseline	ICS	402
6	baseline	MRC_Harwell	388
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	12
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	10

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Warning in RET\$pfunction("adjusted", ...): Completion with error > abseps

mean of ESLIM\_022\_001\_710.Body.Weight.Rotarod.Body.Weight.mean of ESLIM\_022\_001\_709.Body.Weight.Grip.Strength.Body.Weight



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.203311	0.03817922	10
2	Arhgef4	ICS	3.163585	0.06633765	7
3	Arhgef4	MRC_Harwell	3.264498	0.07802380	4
4	baseline	HMGU	3.212149	0.09562386	295
5	baseline	ICS	3.184169	0.07866619	402
6	baseline	MRC_Harwell	3.274838	0.07189921	388
7	Elk4	HMGU	3.135681	0.06247605	7
8	Elk4	ICS	3.125484	0.10064036	7
9	Elk4	MRC_Harwell	3.189653	0.05461970	10
10	Setmar	HMGU	3.150031	0.04512760	7
11	Setmar	ICS	3.227533	0.04831513	7
12	Setmar	MRC_Harwell	3.245565	0.05861378	13
13	Slc38a10	HMGU	3.037351	0.04906901	7
14	Slc38a10	ICS	3.125042	0.03307228	7
15	Slc38a10	MRC_Harwell	3.121199	0.10179529	19
16	Tnfaip1	HMGU	3.157168	0.04969158	7
17	Tnfaip1	ICS	3.172902	0.05871612	8
18	Tnfaip1	MRC_Harwell	3.276272	0.06544229	12
19	Ttll4	HMGU	3.226348	0.07420432	3
20	Ttll4	ICS	3.095294	0.06027021	7
21	Ttll4	MRC_Harwell	3.228138	0.08107298	10

S2.GxL= 0.00031 S2.GxL/S2.error= 0.04837764

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.596	0.099	15.508	0.000	8.163	0.001
lab	2	1.836	0.918	143.274	0.000		
strain:lab	12	0.137	0.011	1.787	0.046		
Residuals	1216	7.792	0.006				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.013	0.459	0.023	0.581
2	Elk4	Arhgef4	-0.061	0.011	0.028	0.052
3	Setmar	Arhgef4	-0.004	0.863	0.028	0.888
4	Slc38a10	Arhgef4	-0.120	0.000	0.027	0.001
5	Tnfaip1	Arhgef4	-0.005	0.833	0.028	0.862
6	Ttll4	Arhgef4	-0.039	0.124	0.030	0.217
7	Elk4	baseline	-0.074	0.000	0.022	0.006
8	Setmar	baseline	-0.017	0.274	0.021	0.441
9	Slc38a10	baseline	-0.133	0.000	0.021	0.000
10	Tnfaip1	baseline	-0.018	0.249	0.021	0.416
11	Ttll4	baseline	-0.052	0.004	0.024	0.049



12	Setmar	Elk4	0.057	0.011	0.027	0.056
13	Slc38a10	Elk4	-0.060	0.006	0.026	0.043
14	Tnfaip1	Elk4	0.056	0.013	0.027	0.059
15	Ttll4	Elk4	0.022	0.357	0.029	0.450
16	Slc38a10	Setmar	-0.116	0.000	0.026	0.001
17	Tnfaip1	Setmar	-0.001	0.967	0.026	0.973
18	Ttll4	Setmar	-0.035	0.144	0.028	0.243
19	Tnfaip1	Slc38a10	0.115	0.000	0.026	0.001
20	Ttll4	Slc38a10	0.082	0.000	0.028	0.012
21	Ttll4	Tnfaip1	-0.034	0.155	0.028	0.254

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.009	0.009	303	0.771	68.089	0.823
2	HMGU	Elk4	Arhgef4	-0.068	0.002	15	0.014	26.507	0.063
3	HMGU	Setmar	Arhgef4	-0.053	0.002	15	0.019	24.525	0.110
4	HMGU	Slc38a10	Arhgef4	-0.166	0.002	15	0.000	25.080	0.000
5	HMGU	Tnfaip1	Arhgef4	-0.046	0.002	15	0.046	25.163	0.171
6	HMGU	Ttll4	Arhgef4	0.023	0.002	11	0.471	21.614	0.567
7	HMGU	Elk4	baseline	-0.076	0.009	300	0.036	99.397	0.086
8	HMGU	Setmar	baseline	-0.062	0.009	300	0.088	98.964	0.161
9	HMGU	Slc38a10	baseline	-0.175	0.009	300	0.000	99.050	0.000
10	HMGU	Tnfaip1	baseline	-0.055	0.009	300	0.131	99.064	0.215
11	HMGU	Ttll4	baseline	0.014	0.009	296	0.798	212.911	0.815
12	HMGU	Setmar	Elk4	0.014	0.003	12	0.631	23.440	0.712
13	HMGU	Slc38a10	Elk4	-0.098	0.003	12	0.007	23.214	0.019
14	HMGU	Tnfaip1	Elk4	0.021	0.003	12	0.490	23.174	0.588
15	HMGU	Ttll4	Elk4	0.091	0.004	8	0.080	12.801	0.103
16	HMGU	Slc38a10	Setmar	-0.113	0.002	12	0.001	23.997	0.004
17	HMGU	Tnfaip1	Setmar	0.007	0.002	12	0.783	23.992	0.843
18	HMGU	Ttll4	Setmar	0.076	0.003	8	0.074	14.810	0.109
19	HMGU	Tnfaip1	Slc38a10	0.120	0.002	12	0.001	23.922	0.003
20	HMGU	Ttll4	Slc38a10	0.189	0.003	8	0.001	14.302	0.001
21	HMGU	Ttll4	Tnfaip1	0.069	0.003	8	0.116	14.224	0.158
22	ICS	baseline	Arhgef4	0.021	0.006	407	0.492	67.406	0.599
23	ICS	Elk4	Arhgef4	-0.038	0.007	12	0.419	18.593	0.472
24	ICS	Setmar	Arhgef4	0.064	0.003	12	0.062	22.937	0.122
25	ICS	Slc38a10	Arhgef4	-0.039	0.003	12	0.194	23.679	0.314
26	ICS	Tnfaip1	Arhgef4	0.009	0.004	13	0.777	23.917	0.821
27	ICS	Ttll4	Arhgef4	-0.068	0.004	12	0.067	22.048	0.119
28	ICS	Elk4	baseline	-0.059	0.006	407	0.052	68.392	0.138
29	ICS	Setmar	baseline	0.043	0.006	407	0.147	67.051	0.269
30	ICS	Slc38a10	baseline	-0.059	0.006	407	0.048	66.838	0.133
31	ICS	Tnfaip1	baseline	-0.011	0.006	408	0.687	58.568	0.765
32	ICS	Ttll4	baseline	-0.089	0.006	407	0.003	67.274	0.026
33	ICS	Setmar	Elk4	0.102	0.006	12	0.032	19.466	0.051

34	ICS	Slc38a10	Elk4	-0.000	0.006	12	0.991	20.086	0.993
35	ICS	Tnfaip1	Elk4	0.047	0.007	13	0.277	21.003	0.341
36	ICS	Ttll4	Elk4	-0.030	0.007	12	0.509	18.896	0.560
37	ICS	Slc38a10	Setmar	-0.102	0.002	12	0.001	23.668	0.005
38	ICS	Tnfaip1	Setmar	-0.055	0.003	13	0.073	24.853	0.158
39	ICS	Ttll4	Setmar	-0.132	0.003	12	0.001	23.424	0.002
40	ICS	Tnfaip1	Slc38a10	0.048	0.002	13	0.079	24.976	0.189
41	ICS	Ttll4	Slc38a10	-0.030	0.002	12	0.275	23.959	0.417
42	ICS	Ttll4	Tnfaip1	-0.078	0.004	13	0.025	24.318	0.062
43	MRC_Harwell	baseline	Arhgef4	0.010	0.005	390	0.775	101.786	0.814
44	MRC_Harwell	Elk4	Arhgef4	-0.075	0.004	12	0.061	21.266	0.104
45	MRC_Harwell	Setmar	Arhgef4	-0.019	0.004	15	0.607	25.500	0.669
46	MRC_Harwell	Slc38a10	Arhgef4	-0.143	0.010	21	0.015	28.558	0.023
47	MRC_Harwell	Tnfaip1	Arhgef4	0.012	0.005	14	0.770	23.111	0.803
48	MRC_Harwell	Ttll4	Arhgef4	-0.036	0.006	12	0.459	18.139	0.507
49	MRC_Harwell	Elk4	baseline	-0.085	0.005	396	0.000	39.997	0.016
50	MRC_Harwell	Setmar	baseline	-0.029	0.005	399	0.147	32.443	0.368
51	MRC_Harwell	Slc38a10	baseline	-0.154	0.005	405	0.000	26.103	0.000
52	MRC_Harwell	Tnfaip1	baseline	0.001	0.005	398	0.946	34.621	0.965
53	MRC_Harwell	Ttll4	baseline	-0.047	0.005	396	0.044	40.555	0.177
54	MRC_Harwell	Setmar	Elk4	0.056	0.003	21	0.030	29.847	0.116
55	MRC_Harwell	Slc38a10	Elk4	-0.068	0.008	27	0.059	38.810	0.117
56	MRC_Harwell	Tnfaip1	Elk4	0.087	0.004	20	0.003	30.610	0.023
57	MRC_Harwell	Ttll4	Elk4	0.038	0.005	18	0.229	29.995	0.340
58	MRC_Harwell	Slc38a10	Setmar	-0.124	0.008	30	0.000	39.985	0.003
59	MRC_Harwell	Tnfaip1	Setmar	0.031	0.004	23	0.228	31.450	0.389
60	MRC_Harwell	Ttll4	Setmar	-0.017	0.005	21	0.555	32.497	0.652
61	MRC_Harwell	Tnfaip1	Slc38a10	0.155	0.008	29	0.000	40.072	0.001
62	MRC_Harwell	Ttll4	Slc38a10	0.107	0.009	27	0.008	39.000	0.022
63	MRC_Harwell	Ttll4	Tnfaip1	-0.048	0.005	20	0.139	31.972	0.237

## 51 ESLIM\_022\_001\_711.Body.Weight.Acoustic.Startle...PPI.Body.Weigh

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	281
5	baseline	ICS	400
6	baseline	MRC_Harwell	355
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	18
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	13
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.212298	0.04618687	10
2	Arhgef4	ICS	3.200830	0.07617814	7
3	Arhgef4	MRC_Harwell	3.280527	0.07713129	4
4	baseline	HMGU	3.226681	0.09685740	281
5	baseline	ICS	3.199941	0.07994647	400
6	baseline	MRC_Harwell	3.289706	0.07152399	355
7	Elk4	HMGU	3.118817	0.06180449	7
8	Elk4	ICS	3.124603	0.09655007	7
9	Elk4	MRC_Harwell	3.187734	0.05648806	10
10	Setmar	HMGU	3.132782	0.05876728	7
11	Setmar	ICS	3.237366	0.05508558	7
12	Setmar	MRC_Harwell	3.290812	0.06322577	13
13	Slc38a10	HMGU	3.032210	0.05656509	7
14	Slc38a10	ICS	3.123832	0.03135586	7
15	Slc38a10	MRC_Harwell	3.145307	0.10116347	18
16	Tnfaip1	HMGU	3.160725	0.07403910	7
17	Tnfaip1	ICS	3.180079	0.06130989	8
18	Tnfaip1	MRC_Harwell	3.289199	0.06706881	13
19	Ttll4	HMGU	3.324689	0.06851233	3
20	Ttll4	ICS	3.134254	0.06555617	7
21	Ttll4	MRC_Harwell	3.247085	0.07012261	9

S2.GxL= 0.00076 S2.GxL/S2.error= 0.11559849

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.640	0.107	16.287	0.000	5.960	0.004
lab	2	1.780	0.890	135.843	0.000		
strain:lab	12	0.196	0.016	2.487	0.003		
Residuals	1166	7.641	0.007				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.007	0.686	0.029	0.809
2	Elk4	Arhgef4	-0.088	0.000	0.033	0.022
3	Setmar	Arhgef4	-0.009	0.705	0.033	0.792
4	Slc38a10	Arhgef4	-0.132	0.000	0.033	0.002
5	Tnfaip1	Arhgef4	-0.019	0.427	0.033	0.584
6	Ttll4	Arhgef4	-0.016	0.534	0.035	0.657
7	Elk4	baseline	-0.095	0.000	0.028	0.005
8	Setmar	baseline	-0.016	0.307	0.028	0.571
9	Slc38a10	baseline	-0.139	0.000	0.027	0.000
10	Tnfaip1	baseline	-0.026	0.097	0.028	0.368
11	Ttll4	baseline	-0.023	0.217	0.030	0.453

12	Setmar	Elk4	0.079	0.001	0.032	0.030
13	Slc38a10	Elk4	-0.043	0.047	0.032	0.197
14	Tnfaip1	Elk4	0.070	0.002	0.032	0.051
15	Ttll4	Elk4	0.072	0.004	0.034	0.056
16	Slc38a10	Setmar	-0.123	0.000	0.032	0.002
17	Tnfaip1	Setmar	-0.010	0.659	0.032	0.766
18	Ttll4	Setmar	-0.007	0.773	0.034	0.839
19	Tnfaip1	Slc38a10	0.113	0.000	0.031	0.004
20	Ttll4	Slc38a10	0.116	0.000	0.033	0.005
21	Ttll4	Tnfaip1	0.003	0.913	0.034	0.939

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.014	0.009	289	0.641	31.136	0.774
2	HMGU	Elk4	Arhgef4	-0.093	0.003	15	0.003	21.689	0.059
3	HMGU	Setmar	Arhgef4	-0.080	0.003	15	0.007	21.294	0.102
4	HMGU	Slc38a10	Arhgef4	-0.180	0.003	15	0.000	21.011	0.001
5	HMGU	Tnfaip1	Arhgef4	-0.052	0.003	15	0.096	23.277	0.300
6	HMGU	Ttll4	Arhgef4	0.112	0.003	11	0.006	22.747	0.039
7	HMGU	Elk4	baseline	-0.108	0.009	286	0.004	41.584	0.051
8	HMGU	Setmar	baseline	-0.094	0.009	286	0.011	41.554	0.087
9	HMGU	Slc38a10	baseline	-0.194	0.009	286	0.000	41.533	0.001
10	HMGU	Tnfaip1	baseline	-0.066	0.009	286	0.075	41.722	0.226
11	HMGU	Ttll4	baseline	0.098	0.009	282	0.082	95.744	0.155
12	HMGU	Setmar	Elk4	0.014	0.004	12	0.673	23.181	0.785
13	HMGU	Slc38a10	Elk4	-0.087	0.004	12	0.018	23.032	0.098
14	HMGU	Tnfaip1	Elk4	0.042	0.005	12	0.273	23.892	0.440
15	HMGU	Ttll4	Elk4	0.206	0.004	8	0.002	18.105	0.002
16	HMGU	Slc38a10	Setmar	-0.101	0.003	12	0.007	22.789	0.055
17	HMGU	Tnfaip1	Setmar	0.028	0.004	12	0.449	23.819	0.602
18	HMGU	Ttll4	Setmar	0.192	0.004	8	0.002	18.468	0.004
19	HMGU	Tnfaip1	Slc38a10	0.129	0.004	12	0.003	23.756	0.022
20	HMGU	Ttll4	Slc38a10	0.292	0.004	8	0.000	18.719	0.000
21	HMGU	Ttll4	Tnfaip1	0.164	0.005	8	0.011	16.556	0.020
22	ICS	baseline	Arhgef4	-0.001	0.006	405	0.977	30.779	0.986
23	ICS	Elk4	Arhgef4	-0.076	0.008	12	0.127	23.294	0.221
24	ICS	Setmar	Arhgef4	0.037	0.004	12	0.324	23.796	0.495
25	ICS	Slc38a10	Arhgef4	-0.077	0.003	12	0.029	22.881	0.137
26	ICS	Tnfaip1	Arhgef4	-0.021	0.005	13	0.569	24.560	0.697
27	ICS	Ttll4	Arhgef4	-0.067	0.005	12	0.105	23.984	0.233
28	ICS	Elk4	baseline	-0.075	0.006	405	0.014	30.964	0.139
29	ICS	Setmar	baseline	0.037	0.006	405	0.218	30.633	0.455
30	ICS	Slc38a10	baseline	-0.076	0.006	405	0.012	30.526	0.133
31	ICS	Tnfaip1	baseline	-0.020	0.006	406	0.485	27.941	0.684
32	ICS	Ttll4	baseline	-0.066	0.006	405	0.031	30.700	0.194
33	ICS	Setmar	Elk4	0.113	0.006	12	0.020	23.867	0.061

34	ICS	Slc38a10	Elk4	-0.001	0.005	12	0.984	23.994	0.989
35	ICS	Tnfaip1	Elk4	0.055	0.006	13	0.201	24.995	0.337
36	ICS	Ttll4	Elk4	0.010	0.007	12	0.830	23.643	0.871
37	ICS	Slc38a10	Setmar	-0.114	0.002	12	0.000	19.931	0.022
38	ICS	Tnfaip1	Setmar	-0.057	0.003	13	0.081	23.091	0.258
39	ICS	Ttll4	Setmar	-0.103	0.004	12	0.008	23.213	0.053
40	ICS	Tnfaip1	Slc38a10	0.056	0.002	13	0.048	21.061	0.242
41	ICS	Ttll4	Slc38a10	0.010	0.003	12	0.711	21.557	0.829
42	ICS	Ttll4	Tnfaip1	-0.046	0.004	13	0.185	23.921	0.377
43	MRC_Harwell	baseline	Arhgef4	0.009	0.005	357	0.799	40.179	0.864
44	MRC_Harwell	Elk4	Arhgef4	-0.093	0.004	12	0.027	23.924	0.097
45	MRC_Harwell	Setmar	Arhgef4	0.010	0.004	15	0.790	26.474	0.851
46	MRC_Harwell	Slc38a10	Arhgef4	-0.135	0.010	20	0.021	31.848	0.051
47	MRC_Harwell	Tnfaip1	Arhgef4	0.009	0.005	15	0.829	26.748	0.877
48	MRC_Harwell	Ttll4	Arhgef4	-0.033	0.005	11	0.456	22.502	0.572
49	MRC_Harwell	Elk4	baseline	-0.102	0.005	363	0.000	21.553	0.034
50	MRC_Harwell	Setmar	baseline	0.001	0.005	366	0.956	19.202	0.980
51	MRC_Harwell	Slc38a10	baseline	-0.144	0.005	371	0.000	17.414	0.004
52	MRC_Harwell	Tnfaip1	baseline	-0.001	0.005	366	0.980	19.227	0.991
53	MRC_Harwell	Ttll4	baseline	-0.043	0.005	362	0.078	22.844	0.362
54	MRC_Harwell	Setmar	Elk4	0.103	0.004	21	0.001	22.089	0.037
55	MRC_Harwell	Slc38a10	Elk4	-0.042	0.008	26	0.234	29.979	0.423
56	MRC_Harwell	Tnfaip1	Elk4	0.101	0.004	21	0.001	22.786	0.042
57	MRC_Harwell	Ttll4	Elk4	0.059	0.004	17	0.057	23.849	0.234
58	MRC_Harwell	Slc38a10	Setmar	-0.146	0.008	29	0.000	28.163	0.007
59	MRC_Harwell	Tnfaip1	Setmar	-0.002	0.004	24	0.950	22.460	0.973
60	MRC_Harwell	Ttll4	Setmar	-0.044	0.004	20	0.143	24.221	0.375
61	MRC_Harwell	Tnfaip1	Slc38a10	0.144	0.008	29	0.000	28.533	0.008
62	MRC_Harwell	Ttll4	Slc38a10	0.102	0.009	25	0.012	31.657	0.070
63	MRC_Harwell	Ttll4	Tnfaip1	-0.042	0.005	20	0.170	24.877	0.398

## 52 ESLIM\_022\_001\_712.Body.Weight.Hot.Plate.Body.Weight

count after filtering

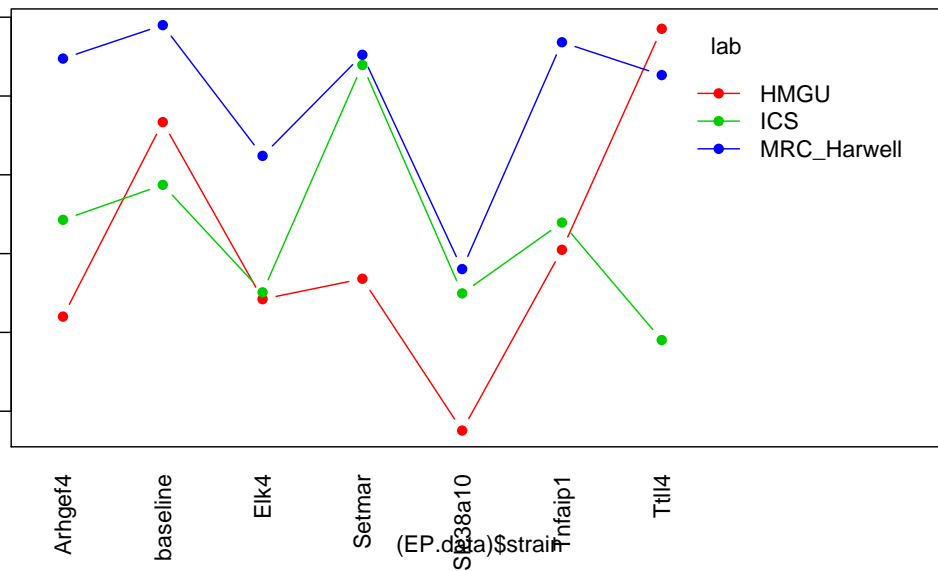
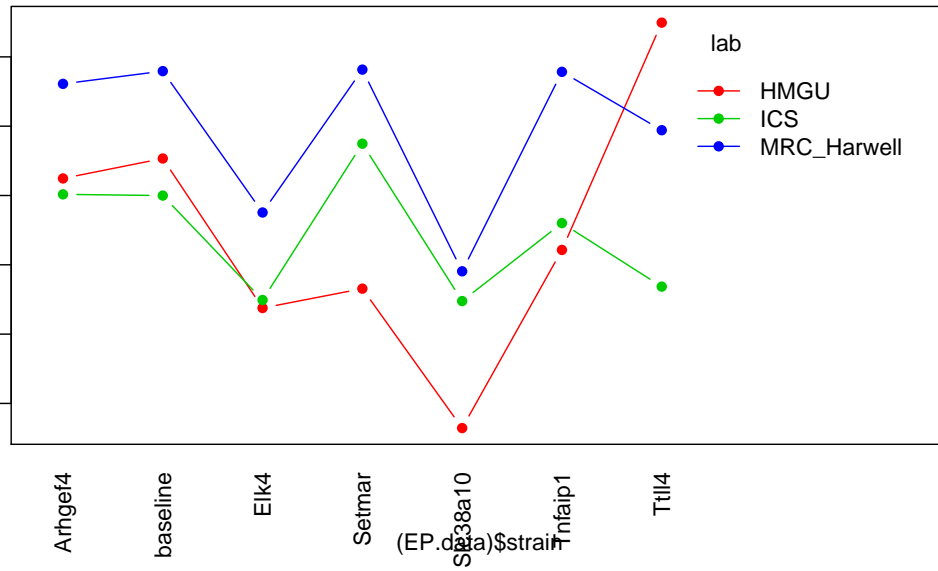
	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	302
5	baseline	ICS	403
6	baseline	MRC_Harwell	372
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	12
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	8

Warning in RET\$pfunction("adjusted", ...): Completion with error > abseps

mean of ESLIM\_022\_001\_712.Body.Weight.Hot.Plate.Body.Weight of ESLIM\_022\_001\_711.Body.Weight.Acoustic.Startle... PPI.Body.





## Strains Included

Arhgef4	Elk4	Slc38a10	Ttl4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.160027	0.12745671	10
2	Arhgef4	ICS	3.221439	0.07731290	7
3	Arhgef4	MRC_Harwell	3.323747	0.07428035	4
4	baseline	HMGU	3.283434	0.09748652	302
5	baseline	ICS	3.243613	0.08375761	403
6	baseline	MRC_Harwell	3.344965	0.07600249	372
7	Elk4	HMGU	3.171075	0.06091916	7
8	Elk4	ICS	3.175445	0.10081924	7
9	Elk4	MRC_Harwell	3.262022	0.06403671	10
10	Setmar	HMGU	3.184048	0.05122479	7
11	Setmar	ICS	3.319698	0.08722648	7
12	Setmar	MRC_Harwell	3.326141	0.06746561	13
13	Slc38a10	HMGU	3.087709	0.05703852	7
14	Slc38a10	ICS	3.174762	0.02698274	7
15	Slc38a10	MRC_Harwell	3.190182	0.08692195	19
16	Tnfaip1	HMGU	3.202430	0.08716623	7
17	Tnfaip1	ICS	3.219676	0.05232647	8
18	Tnfaip1	MRC_Harwell	3.334114	0.06895539	12
19	Ttll4	HMGU	3.342671	0.06442135	3
20	Ttll4	ICS	3.145135	0.05827667	7
21	Ttll4	MRC_Harwell	3.313284	0.06826753	9

S2.GxL= 0.00141 S2.GxL/S2.error= 0.19720371

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.763	0.127	17.854	0.000	3.473	0.032
lab	2	2.229	1.115	156.393	0.000		
strain:lab	12	0.294	0.024	3.437	0.000		
Residuals	1207	8.601	0.007				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.061	0.001	0.036	0.121
2	Elk4	Arhgef4	-0.027	0.285	0.040	0.514
3	Setmar	Arhgef4	0.046	0.060	0.040	0.269
4	Slc38a10	Arhgef4	-0.081	0.001	0.040	0.064
5	Tnfaip1	Arhgef4	0.024	0.336	0.040	0.564
6	Ttll4	Arhgef4	0.023	0.399	0.042	0.598
7	Elk4	baseline	-0.088	0.000	0.035	0.029
8	Setmar	baseline	-0.014	0.383	0.035	0.689
9	Slc38a10	baseline	-0.141	0.000	0.035	0.002
10	Tnfaip1	baseline	-0.037	0.025	0.035	0.311
11	Ttll4	baseline	-0.038	0.052	0.037	0.324

12	Setmar	Elk4	0.073	0.002	0.039	0.085
13	Slc38a10	Elk4	-0.054	0.018	0.039	0.190
14	Tnfaip1	Elk4	0.051	0.033	0.039	0.218
15	Ttll4	Elk4	0.050	0.056	0.041	0.247
16	Slc38a10	Setmar	-0.127	0.000	0.038	0.006
17	Tnfaip1	Setmar	-0.023	0.326	0.039	0.570
18	Ttll4	Setmar	-0.024	0.350	0.040	0.569
19	Tnfaip1	Slc38a10	0.104	0.000	0.038	0.018
20	Ttll4	Slc38a10	0.103	0.000	0.040	0.024
21	Ttll4	Tnfaip1	-0.001	0.966	0.040	0.979

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.123	0.010	310	0.000	21.954	0.058
2	HMGU	Elk4	Arhgef4	0.011	0.011	15	0.835	26.566	0.883
3	HMGU	Setmar	Arhgef4	0.024	0.011	15	0.646	26.424	0.747
4	HMGU	Slc38a10	Arhgef4	-0.072	0.011	15	0.183	26.509	0.338
5	HMGU	Tnfaip1	Arhgef4	0.042	0.013	15	0.458	26.895	0.586
6	HMGU	Ttll4	Arhgef4	0.183	0.014	11	0.039	19.672	0.067
7	HMGU	Elk4	baseline	-0.112	0.009	307	0.003	26.307	0.094
8	HMGU	Setmar	baseline	-0.099	0.009	307	0.008	26.269	0.136
9	HMGU	Slc38a10	baseline	-0.196	0.009	307	0.000	26.291	0.006
10	HMGU	Tnfaip1	baseline	-0.081	0.009	307	0.030	26.443	0.222
11	HMGU	Ttll4	baseline	0.059	0.009	303	0.295	51.914	0.448
12	HMGU	Setmar	Elk4	0.013	0.003	12	0.674	18.992	0.834
13	HMGU	Slc38a10	Elk4	-0.083	0.003	12	0.021	19.539	0.192
14	HMGU	Tnfaip1	Elk4	0.031	0.006	12	0.450	22.360	0.642
15	HMGU	Ttll4	Elk4	0.172	0.004	8	0.004	19.995	0.020
16	HMGU	Slc38a10	Setmar	-0.096	0.003	12	0.006	18.572	0.128
17	HMGU	Tnfaip1	Setmar	0.018	0.005	12	0.639	21.809	0.781
18	HMGU	Ttll4	Setmar	0.159	0.003	8	0.003	19.675	0.025
19	HMGU	Tnfaip1	Slc38a10	0.115	0.005	12	0.013	22.140	0.096
20	HMGU	Ttll4	Slc38a10	0.255	0.003	8	0.000	19.927	0.001
21	HMGU	Ttll4	Tnfaip1	0.140	0.007	8	0.038	18.636	0.087
22	ICS	baseline	Arhgef4	0.022	0.007	408	0.487	22.154	0.724
23	ICS	Elk4	Arhgef4	-0.046	0.008	12	0.357	23.765	0.527
24	ICS	Setmar	Arhgef4	0.098	0.007	12	0.046	23.215	0.168
25	ICS	Slc38a10	Arhgef4	-0.047	0.003	12	0.157	19.318	0.457
26	ICS	Tnfaip1	Arhgef4	-0.002	0.004	13	0.959	20.537	0.978
27	ICS	Ttll4	Arhgef4	-0.076	0.005	12	0.059	21.309	0.250
28	ICS	Elk4	baseline	-0.068	0.007	408	0.034	22.256	0.283
29	ICS	Setmar	baseline	0.076	0.007	408	0.018	22.194	0.232
30	ICS	Slc38a10	baseline	-0.069	0.007	408	0.031	22.026	0.277
31	ICS	Tnfaip1	baseline	-0.024	0.007	409	0.421	20.669	0.698
32	ICS	Ttll4	baseline	-0.098	0.007	408	0.002	22.091	0.126
33	ICS	Setmar	Elk4	0.144	0.009	12	0.014	23.936	0.060

34	ICS	Slc38a10	Elk4	-0.001	0.005	12	0.986	22.161	0.992
35	ICS	Tnfaip1	Elk4	0.044	0.006	13	0.296	22.925	0.515
36	ICS	Ttll4	Elk4	-0.030	0.007	12	0.504	23.207	0.664
37	ICS	Slc38a10	Setmar	-0.145	0.004	12	0.001	20.611	0.033
38	ICS	Tnfaip1	Setmar	-0.100	0.005	13	0.017	21.598	0.135
39	ICS	Ttll4	Setmar	-0.175	0.006	12	0.001	22.216	0.015
40	ICS	Tnfaip1	Slc38a10	0.045	0.002	13	0.062	16.050	0.446
41	ICS	Ttll4	Slc38a10	-0.030	0.002	12	0.246	16.811	0.618
42	ICS	Ttll4	Tnfaip1	-0.075	0.003	13	0.022	18.519	0.231
43	MRC_Harwell	baseline	Arhgef4	0.021	0.006	374	0.579	27.424	0.748
44	MRC_Harwell	Elk4	Arhgef4	-0.062	0.004	12	0.144	22.171	0.361
45	MRC_Harwell	Setmar	Arhgef4	0.002	0.005	15	0.952	23.225	0.971
46	MRC_Harwell	Slc38a10	Arhgef4	-0.134	0.007	21	0.010	28.223	0.070
47	MRC_Harwell	Tnfaip1	Arhgef4	0.010	0.005	14	0.802	23.278	0.878
48	MRC_Harwell	Ttll4	Arhgef4	-0.010	0.005	11	0.808	22.236	0.879
49	MRC_Harwell	Elk4	baseline	-0.083	0.006	380	0.001	17.522	0.173
50	MRC_Harwell	Setmar	baseline	-0.019	0.006	383	0.379	16.196	0.746
51	MRC_Harwell	Slc38a10	baseline	-0.155	0.006	389	0.000	14.916	0.015
52	MRC_Harwell	Tnfaip1	baseline	-0.011	0.006	382	0.626	16.568	0.853
53	MRC_Harwell	Ttll4	baseline	-0.032	0.006	379	0.216	18.198	0.597
54	MRC_Harwell	Setmar	Elk4	0.064	0.004	21	0.031	18.673	0.298
55	MRC_Harwell	Slc38a10	Elk4	-0.072	0.006	27	0.030	20.671	0.257
56	MRC_Harwell	Tnfaip1	Elk4	0.072	0.004	20	0.020	19.020	0.246
57	MRC_Harwell	Ttll4	Elk4	0.051	0.004	17	0.109	19.653	0.412
58	MRC_Harwell	Slc38a10	Setmar	-0.136	0.006	30	0.000	19.380	0.036
59	MRC_Harwell	Tnfaip1	Setmar	0.008	0.005	23	0.773	18.514	0.895
60	MRC_Harwell	Ttll4	Setmar	-0.013	0.005	20	0.667	19.399	0.834
61	MRC_Harwell	Tnfaip1	Slc38a10	0.144	0.006	29	0.000	19.896	0.028
62	MRC_Harwell	Ttll4	Slc38a10	0.123	0.007	26	0.001	21.607	0.062
63	MRC_Harwell	Ttll4	Tnfaip1	-0.021	0.005	19	0.500	19.764	0.737

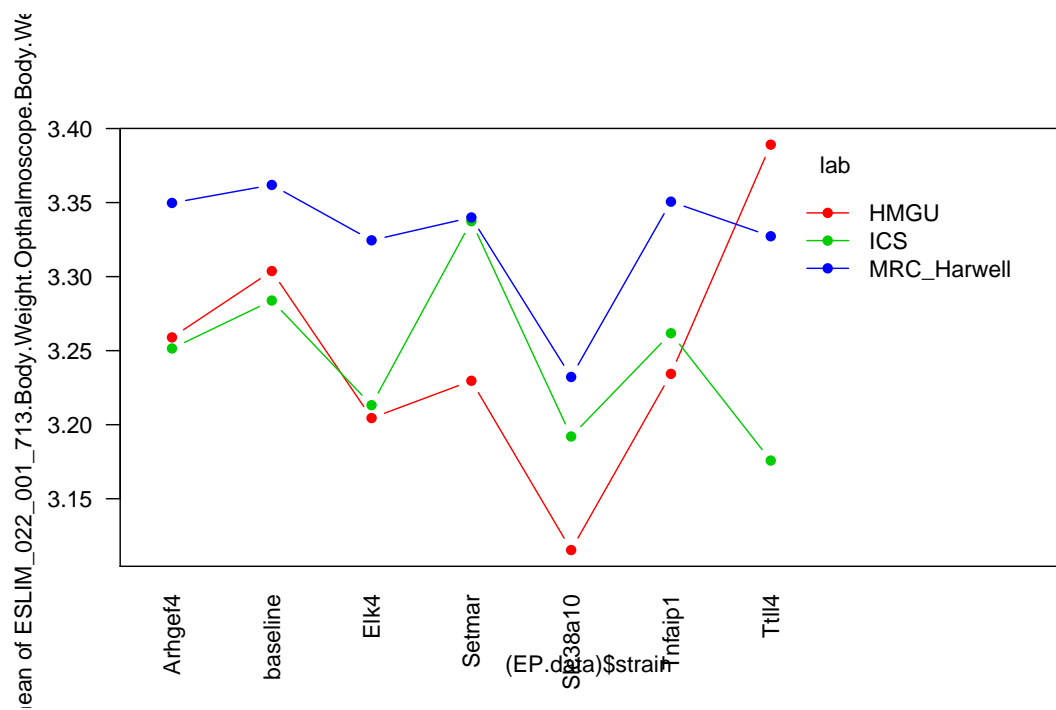
## 53 ESLIM\_022\_001\_713.Body.Weight.Ophthalmoscope.Body.Weight

count after filtering

	strain	lab	n
1	Arhgef4	HMGU	10
2	Arhgef4	ICS	7
3	Arhgef4	MRC_Harwell	4
4	baseline	HMGU	292
5	baseline	ICS	114
6	baseline	MRC_Harwell	294
7	Elk4	HMGU	7
8	Elk4	ICS	7
9	Elk4	MRC_Harwell	10
10	Setmar	HMGU	7
11	Setmar	ICS	7
12	Setmar	MRC_Harwell	13
13	Slc38a10	HMGU	7
14	Slc38a10	ICS	7
15	Slc38a10	MRC_Harwell	19
16	Tnfaip1	HMGU	7
17	Tnfaip1	ICS	8
18	Tnfaip1	MRC_Harwell	6
19	Ttll4	HMGU	3
20	Ttll4	ICS	7
21	Ttll4	MRC_Harwell	9

Animals dropped

	strain	lab	n
1	Aldh2	ICS	10
2	Aldh2	MRC_Harwell	11
3	Entpd1	ICS	9
4	Entpd1	MRC_Harwell	10
5	Sytl1	ICS	7



## Strains Included

Arhgef4	Elk4	Slc38a10	Ttll4
baseline	Setmar	Tnfaip1	

	strain	lab	mean	sd	n
1	Arhgef4	HMGU	3.258936	0.08069530	10
2	Arhgef4	ICS	3.251470	0.07205307	7
3	Arhgef4	MRC_Harwell	3.349760	0.06875507	4
4	baseline	HMGU	3.303752	0.10308406	292
5	baseline	ICS	3.283839	0.09246860	114
6	baseline	MRC_Harwell	3.361908	0.08463165	294
7	Elk4	HMGU	3.204471	0.08197670	7
8	Elk4	ICS	3.213190	0.09715563	7
9	Elk4	MRC_Harwell	3.324512	0.07416477	10
10	Setmar	HMGU	3.229642	0.03722992	7
11	Setmar	ICS	3.337436	0.07469292	7
12	Setmar	MRC_Harwell	3.339955	0.06815765	13
13	Slc38a10	HMGU	3.115312	0.05671427	7
14	Slc38a10	ICS	3.192014	0.02287439	7
15	Slc38a10	MRC_Harwell	3.232226	0.08544260	19
16	Tnfaip1	HMGU	3.234327	0.06037416	7
17	Tnfaip1	ICS	3.261773	0.06065206	8
18	Tnfaip1	MRC_Harwell	3.350610	0.07134346	6
19	Ttll4	HMGU	3.389130	0.05195335	3
20	Ttll4	ICS	3.175764	0.06243614	7
21	Ttll4	MRC_Harwell	3.327258	0.06953796	9

S2.GxL= 0.00037 S2.GxL/S2.error= 0.04445002

	Df	Sum Sq	Mean Sq	F.FLM	p.FLM	F.RLM	p.RLM
strain	6	0.681	0.113	13.749	0.000	6.249	0.004
lab	2	0.946	0.473	57.295	0.000		
strain:lab	12	0.198	0.017	2.004	0.021		
Residuals	824	6.799	0.008				

	strain1	strain2	diff	p.FLM	Std.Error.RLM	p.RLM
1	baseline	Arhgef4	0.032	0.111	0.026	0.239
2	Elk4	Arhgef4	-0.035	0.201	0.032	0.296
3	Setmar	Arhgef4	0.016	0.547	0.031	0.621
4	Slc38a10	Arhgef4	-0.104	0.000	0.031	0.005
5	Tnfaip1	Arhgef4	-0.003	0.915	0.032	0.928
6	Ttll4	Arhgef4	-0.010	0.717	0.034	0.761
7	Elk4	baseline	-0.067	0.000	0.025	0.019
8	Setmar	baseline	-0.016	0.363	0.024	0.513
9	Slc38a10	baseline	-0.136	0.000	0.023	0.000
10	Tnfaip1	baseline	-0.035	0.081	0.026	0.196
11	Ttll4	baseline	-0.043	0.044	0.027	0.139

12	Setmar	Elk4	0.051	0.047	0.030	0.119
13	Slc38a10	Elk4	-0.069	0.005	0.029	0.037
14	Tnfaip1	Elk4	0.032	0.242	0.032	0.334
15	Ttll4	Elk4	0.024	0.383	0.032	0.468
16	Slc38a10	Setmar	-0.120	0.000	0.029	0.001
17	Tnfaip1	Setmar	-0.019	0.475	0.031	0.554
18	Ttll4	Setmar	-0.026	0.333	0.032	0.425
19	Tnfaip1	Slc38a10	0.101	0.000	0.030	0.006
20	Ttll4	Slc38a10	0.094	0.000	0.031	0.011
21	Ttll4	Tnfaip1	-0.007	0.796	0.033	0.827

	lab	strain1	strain2	diff	s2pooled	df.FLM	p.FLM	df.RLM	p.RLM
1	HMGU	baseline	Arhgef4	0.045	0.011	300	0.175	67.424	0.298
2	HMGU	Elk4	Arhgef4	-0.054	0.007	15	0.194	25.299	0.271
3	HMGU	Setmar	Arhgef4	-0.029	0.004	15	0.388	26.834	0.498
4	HMGU	Slc38a10	Arhgef4	-0.144	0.005	15	0.001	26.396	0.003
5	HMGU	Tnfaip1	Arhgef4	-0.025	0.005	15	0.506	26.273	0.591
6	HMGU	Ttll4	Arhgef4	0.130	0.006	11	0.025	17.047	0.036
7	HMGU	Elk4	baseline	-0.099	0.011	297	0.012	97.344	0.040
8	HMGU	Setmar	baseline	-0.074	0.010	297	0.059	96.297	0.123
9	HMGU	Slc38a10	baseline	-0.188	0.010	297	0.000	96.656	0.000
10	HMGU	Tnfaip1	baseline	-0.069	0.010	297	0.077	96.741	0.149
11	HMGU	Ttll4	baseline	0.085	0.011	293	0.154	208.304	0.194
12	HMGU	Setmar	Elk4	0.025	0.004	12	0.474	22.881	0.569
13	HMGU	Slc38a10	Elk4	-0.089	0.005	12	0.036	21.827	0.068
14	HMGU	Tnfaip1	Elk4	0.030	0.005	12	0.453	21.586	0.533
15	HMGU	Ttll4	Elk4	0.185	0.006	8	0.008	12.326	0.008
16	HMGU	Slc38a10	Setmar	-0.114	0.002	12	0.001	23.919	0.005
17	HMGU	Tnfaip1	Setmar	0.005	0.003	12	0.864	23.996	0.903
18	HMGU	Ttll4	Setmar	0.159	0.002	8	0.001	18.777	0.001
19	HMGU	Tnfaip1	Slc38a10	0.119	0.003	12	0.003	23.535	0.009
20	HMGU	Ttll4	Slc38a10	0.274	0.003	8	0.000	15.457	0.000
21	HMGU	Ttll4	Tnfaip1	0.155	0.003	8	0.005	14.882	0.006
22	ICS	baseline	Arhgef4	0.032	0.008	119	0.366	68.403	0.473
23	ICS	Elk4	Arhgef4	-0.038	0.007	12	0.419	19.539	0.480
24	ICS	Setmar	Arhgef4	0.086	0.005	12	0.049	21.363	0.086
25	ICS	Slc38a10	Arhgef4	-0.059	0.003	12	0.060	23.940	0.145
26	ICS	Tnfaip1	Arhgef4	0.010	0.004	13	0.768	24.154	0.816
27	ICS	Ttll4	Arhgef4	-0.076	0.005	12	0.057	22.314	0.107
28	ICS	Elk4	baseline	-0.071	0.009	119	0.053	69.801	0.122
29	ICS	Setmar	baseline	0.054	0.008	119	0.136	68.531	0.236
30	ICS	Slc38a10	baseline	-0.092	0.008	119	0.010	66.846	0.043
31	ICS	Tnfaip1	baseline	-0.022	0.008	120	0.508	61.131	0.609
32	ICS	Ttll4	baseline	-0.108	0.008	119	0.003	67.974	0.018
33	ICS	Setmar	Elk4	0.124	0.008	12	0.020	19.386	0.032



34	ICS	Slc38a10	Elk4	-0.021	0.005	12	0.585	21.812	0.653
35	ICS	Tnfaip1	Elk4	0.049	0.006	13	0.259	22.217	0.336
36	ICS	Ttll4	Elk4	-0.037	0.007	12	0.408	20.088	0.475
37	ICS	Slc38a10	Setmar	-0.145	0.003	12	0.000	23.837	0.001
38	ICS	Tnfaip1	Setmar	-0.076	0.005	13	0.049	23.981	0.100
39	ICS	Ttll4	Setmar	-0.162	0.005	12	0.001	22.090	0.002
40	ICS	Tnfaip1	Slc38a10	0.070	0.002	13	0.013	24.467	0.068
41	ICS	Ttll4	Slc38a10	-0.016	0.002	12	0.530	23.855	0.665
42	ICS	Ttll4	Tnfaip1	-0.086	0.004	13	0.018	24.665	0.051
43	MRC_Harwell	baseline	Arhgef4	0.012	0.007	296	0.775	114.829	0.810
44	MRC_Harwell	Elk4	Arhgef4	-0.025	0.005	12	0.569	20.240	0.626
45	MRC_Harwell	Setmar	Arhgef4	-0.010	0.005	15	0.805	25.558	0.838
46	MRC_Harwell	Slc38a10	Arhgef4	-0.118	0.007	21	0.018	31.546	0.035
47	MRC_Harwell	Tnfaip1	Arhgef4	0.001	0.005	8	0.986	13.589	0.987
48	MRC_Harwell	Ttll4	Arhgef4	-0.023	0.005	11	0.600	19.172	0.656
49	MRC_Harwell	Elk4	baseline	-0.037	0.007	302	0.169	45.989	0.335
50	MRC_Harwell	Setmar	baseline	-0.022	0.007	305	0.357	36.668	0.547
51	MRC_Harwell	Slc38a10	baseline	-0.130	0.007	311	0.000	28.285	0.001
52	MRC_Harwell	Tnfaip1	baseline	-0.011	0.007	298	0.746	75.526	0.799
53	MRC_Harwell	Ttll4	baseline	-0.035	0.007	301	0.225	50.527	0.383
54	MRC_Harwell	Setmar	Elk4	0.015	0.005	21	0.609	31.865	0.704
55	MRC_Harwell	Slc38a10	Elk4	-0.092	0.007	27	0.008	36.844	0.034
56	MRC_Harwell	Tnfaip1	Elk4	0.026	0.005	14	0.501	24.563	0.580
57	MRC_Harwell	Ttll4	Elk4	0.003	0.005	17	0.935	28.985	0.949
58	MRC_Harwell	Slc38a10	Setmar	-0.108	0.006	30	0.001	35.587	0.010
59	MRC_Harwell	Tnfaip1	Setmar	0.011	0.005	17	0.759	28.923	0.809
60	MRC_Harwell	Ttll4	Setmar	-0.013	0.005	20	0.675	31.168	0.755
61	MRC_Harwell	Tnfaip1	Slc38a10	0.118	0.007	23	0.006	34.977	0.017
62	MRC_Harwell	Ttll4	Slc38a10	0.095	0.007	26	0.007	36.558	0.032
63	MRC_Harwell	Ttll4	Tnfaip1	-0.023	0.005	13	0.539	23.419	0.616

```
[,1] [,2] [,3] [,4] [,5] [,6] [1,] "baseline" "baseline" "baseline" "baseline" "baseline" "baseline"
[2,] "Elk4" "Setmar" "Slc38a10" "Tnfaip1" "Ttll4" "Arhgef4" [7] [,8] [,9] [,10] [,11] [,12] [,13] [1,]
"Elk4" "Elk4" "Elk4" "Elk4" "Elk4" "Setmar" "Setmar" [2,] "Setmar" "Slc38a10" "Tnfaip1" "Ttll4"
"Arhgef4" "Slc38a10" "Tnfaip1" [,14] [,15] [,16] [,17] [,18] [,19] [1,] "Setmar" "Setmar" "Slc38a10"
"Slc38a10" "Slc38a10" "Tnfaip1" [2,] "Ttll4" "Arhgef4" "Tnfaip1" "Ttll4" "Arhgef4" "Ttll4" [,20]
[,21] [1,] "Tnfaip1" "Ttll4" [2,] "Arhgef4" "Arhgef4"
```

## Single lab analysis - power and FDP

```
Number of measures: 48 endpoints measured for 10 genotypes in 3 labs
Number of significant measures according to RLM: 109
Number of significant measures according to FLM: 329
Significant GxL variance according to Fixed model: 75 %
```

## Standard analysis

	No Difference between genotypes	Difference between genotypes	Total
Declared significant	615	195	810
Declared non-significant	2001	132	2133
Total	2616	327	2943

```
Power - standard t-test: 195 / 327 = 0.5963
FDP - standard t-test: 0.7586
Type I error : 615 / 2616 = 0.2351
Type II error : 132 / 327 = 0.4037
```

## G×L - adjusted analysis

	No Difference between genotypes	Difference between genotypes	Total
Declared significant	138	150	288
Declared non-significant	2478	177	2655
Total	2616	327	2943

```
Power - GxL adjusted: 150 / 327 = 0.4587
FDP - GxL adjusted: 0.4343
Type I error : 138 / 2616 = 0.0528
Type II error : 177 / 327 = 0.5413
```

Opposite significant Proportion :  $65 / 981 = 0.0663$   
Proportion of "opposite significant" out of measures in which genotype  
effect is significant according to FLM but not RLM :  $14 / 220 = 0.0636$   
Proportion of "opposite significant" out of measures in which genotype  
effect is significant according to RLM:  $0 / 109 = 0$

## Single lab analysis using BH - power and FDP

### Standard analysis

	No Difference between genotypes	Difference between genotypes	Total
Declared significant	334	124	458
Declared non-significant	2282	203	2485
Total	2616	327	2943

Power - standard t-test:  $124 / 327 = 0.3792$

FDP - standard t-test: 0.4889

Type I error :  $334 / 2616 = 0.1277$

Type II error :  $203 / 327 = 0.6208$

### G×L - adjusted analysis

	No Difference between genotypes	Difference between genotypes	Total
Declared significant	12	48	60
Declared non-significant	2604	279	2883
Total	2616	327	2943

Power - GxL adjusted:  $48 / 327 = 0.1468$

FDP - GxL adjusted: 0.0616

Type I error :  $12 / 2616 = 0.0046$

Type II error :  $279 / 327 = 0.8532$

Opposite significant Proportion :  $26 / 981 = 0.0265$

Proportion of "opposite significant" out of measures in which genotype effect is significant according to FLM but not RLM :  $0 / 220 = 0$

Proportion of "opposite significant" out of measures in which genotype effect is significant according to RLM:  $0 / 109 = 0$

\clearpage

\part\*{ Estimates Of standard deviations for each endpoint }

% latex table generated in R 3.3.1 by xtable 1.8-2 package

% Thu Nov 03 18:04:37 2016

\begin{longtable}{rlll}

\hline

& S\\_error & S\\_lab & S\\_interaction \\\

\hline

ESLIM\\_004\\_001\\_701.Simplified.IPGTT.Glucose.response.AUC & & & \\\

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ESLIM\_005\_001\_002.DEXA.Fat.mass & & & \\
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ESLIM\_005\_001\_005.DEXA.Bone.Mineral.Content & & & \\
ESLIM\_005\_001\_006.DEXA.Body.length & & & \\
ESLIM\_005\_001\_701.DEXA.BMC.Body.weight & & & \\
ESLIM\_005\_001\_702.DEXA.Lean.Body.weight & & & \\
ESLIM\_005\_001\_703.DEXA.Fat.Body.weight & & & \\
ESLIM\_005\_001\_704.DEXA.Bone.area..BMC.BMD. & & & \\
ESLIM\_007\_001\_004.Open.field.Whole.arena.permanence.time & & & \\
ESLIM\_007\_001\_005.Open.field.Whole.arena.average.speed & & & \\
ESLIM\_007\_001\_006.Open.field.Periphery.distance.travelled & & & \\
ESLIM\_007\_001\_007.Open.field.Periphery.resting.time & & & \\
ESLIM\_007\_001\_008.Open.field.Periphery.permanence.time & & & \\
ESLIM\_007\_001\_009.Open.field.Periphery.average.speed & & & \\
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ESLIM\_008\_001\_008.Modified.SHIRPA.Locomotor.activity & & & \\
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ESLIM\_009\_001\_703.Grip.Strength.Forelimb.grip.strength.normalised.against.body.weight & & & \\
ESLIM\_009\_001\_704.Grip.Strength.Forelimb.and.hindlimb.grip.strength.normalised.against.body.weight & & & \\
ESLIM\_011\_001\_001.Acoustic.Startle.PPI.BN.startle.magnitude. & & & \\
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ESLIM\_011\_001\_004.Acoustic.Startle.PPI.PP3.startle.magnitude & & & \\
ESLIM\_011\_001\_005.Acoustic.Startle.PPI.PP4.startle.magnitude & & & \\
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ESLIM\_021\_001\_006.Fasted.Clinical.Chemistry.LDL.cholesterol & & &

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ESLIM\_022\_001\_705.Body.Weight.Calorimetry.Body.Weight & & & \\
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ESLIM\_022\_001\_713.Body.Weight.Ophthalmoscope.Body.Weight & & & \\
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\end{longtable}

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