Table S1A. RNAseq Gene expression in MLECs from miR-217KI apoE-/- (KI) or Control apoE-/- (wt) mice (p < 0,0

ID	AvrExp	Norm_WT_2	Raw_WT_2	Norm_WT_3	Raw_WT_3	Norm_KI_1	Raw_KI_1
ENSMUSG00	4.93658699	9.19920949	72	10.4261338	84	0.06935975	0
ENSMUSG00	1.65658073	3.23558403	25	3.26973428	26	0.06935975	0
ENSMUSG00	1.05912308	1.5860706	12	2.52941708	20	0.06935975	0
ENSMUSG00	17.2762118	30.5159984	240	18.0760782	146	20.4611256	147
ENSMUSG00	5.8495905	15.2897206	120	5.49068586	44	2.56631067	18
ENSMUSG00	0.93836146	1.96672755	15	1.66571369	13	0.06935975	0
ENSMUSG00	2.7148873	7.42281042	58	2.89957568	23	0.48551823	3
ENSMUSG00	0.81060095	1.33229931	10	1.78909989	14	0.06935975	0
ENSMUSG00	1.96221453	1.71295625	13	5.73745826	46	0.34679874	2
ENSMUSG00	1.1933415	2.60115579	20	1.91248609	15	0.20807924	1
ENSMUSG00	0.62552165	1.33229931	10	1.04878269	8	0.06935975	0
ENSMUSG00	0.59292538	1.07852801	8	1.17216889	9	0.06935975	0
ENSMUSG00	2.80101545	2.60115579	20	7.09470645	57	1.4565547	10
ENSMUSG00	3.57114569	5.5195257	43	7.09470645	57	0.06935975	0
ENSMUSG00	3.57114569	5.5195257	43	7.09470645	57	0.06935975	0
ENSMUSG00	2.49934174	2.47427014	19	5.73745826	46	1.7339937	12
ENSMUSG00	0.74300887	1.20541366	9	1.54232749	12	0.06935975	0
ENSMUSG00	1.10574383	1.5860706	12	2.40603088	19	0.06935975	0
ENSMUSG00	1.9406044	1.96672755	15	4.01005147	32	1.7339937	12
ENSMUSG00	1.1786939	1.20541366	9	3.14634808	25	0.20807924	1
ENSMUSG00	0.62848012	1.20541366	9	1.04878269	8	0.20807924	1
ENSMUSG00	1.63848573	1.96672755	15	3.63989288	29	0.06935975	0
ENSMUSG00	0.76883131	1.20541366	9	1.54232749	12	0.06935975	0
ENSMUSG00	0.85984629	1.71295625	13	1.29555509	10	0.06935975	0
ENSMUSG00	1.21493254	1.71295625	13	2.40603088	19	0.06935975	0
ENSMUSG00	0.70713821	1.20541366	9	1.29555509	10	0.06935975	0
ENSMUSG00	0.95369476	1.96672755	15	1.17216889	9	0.62423773	4
ENSMUSG00	11.7654278	12.4982363	98	29.9211533	242	1.5952742	11
ENSMUSG00	0.66228513	1.07852801	8	1.17216889	9	0.34679874	2
ENSMUSG00	1.48710262	3.10869838	24	1.78909989	14	0.06935975	0
ENSMUSG00	1.28064992	1.45918495	11	3.02296188	24	0.48551823	3
ENSMUSG00	0.73296064	1.20541366	9	1.29555509	10	0.06935975	0
ENSMUSG00	6.25461426	10.7218373	84	11.4132234	92	1.17911571	8
ENSMUSG00	1.11824364	1.8398419	14	1.78909989	14	0.06935975	0
ENSMUSG00	1.23573086	1.71295625	13	2.28264469	18	0.06935975	0
ENSMUSG00	1.17753721	2.22049884	17	1.54232749	12	0.06935975	0
ENSMUSG00	0.84979806	1.71295625	13	1.04878269	8	0.06935975	0
ENSMUSG00	0.81545206	1.20541366	9	1.41894129	11	0.06935975	0
ENSMUSG00	0.69708998	1.20541366	9	1.04878269	8	0.06935975	0
ENSMUSG00	1.70926132	2.72804144	21	3.02296188	24	0.20807924	1
ENSMUSG00	4.952614	9.07232385	71	6.72454786	54	0.34679874	2
ENSMUSG00	2.23937864	2.72804144	21	4.62698247	37	0.20807924	1
ENSMUSG00	1.61724651	1.96672755	15	3.51650668	28	0.62423773	4
ENSMUSG00	1.98873008	3.61624097	28	3.14634808	25	0.62423773	4
ENSMUSG00	2.76440411	4.12378357	32	4.87375487	39	1.5952742	11
ENSMUSG00	3.05482959	2.72804144	21	7.71163745	62	0.90167672	6
ENSMUSG00	1.41532719	2.0936132	16	2.65280328	21	0.34679874	2
ENSMUSG00	3.52968682	3.61624097	28	7.95840985	64	1.87271319	13
ENSMUSG00	0.90163388	1.45918495	11	1.54232749	12	0.34679874	2
ENSMUSG00	0.68898242	1.20541366	9	1.04878269	8	0.34679874	2
ENSMUSG00	1.18966904	1.96672755	15	1.91248609	15	0.20807924	1
ENSMUSG00	4.425612	7.67658172	60	6.97132025	56	1.04039622	7

ENSMUSG00	5.98988104	11.1024942	87	8.69872704	70	1.31783521	9
ENSMUSG00	1.07130695	1.96672755	15	1.54232749	12	0.20807924	1
ENSMUSG00	1.75435741	3.23558403	25	2.28264469	18	0.20807924	1
ENSMUSG00	2.9132876	2.72804144	21	6.97132025	56	1.17911571	8
ENSMUSG00	1.71738682	2.34738449	18	3.02296188	24	0.20807924	1
ENSMUSG00	2.17995136	4.12378357	32	3.02296188	24	0.90167672	6
ENSMUSG00	4.70173296	5.90018264	46	9.43904424	76	1.04039622	7
ENSMUSG00	3.55215094	4.63132616	36	6.97132025	56	0.90167672	6
ENSMUSG00	2.82878079	5.0119831	39	4.01005147	32	0.48551823	3
ENSMUSG00	0.76676565	1.07852801	8	1.41894129	11	0.20807924	1
ENSMUSG00	1.34860997	2.0936132	16	2.28264469	18	0.34679874	2
ENSMUSG00	12.9760079	14.0208641	110	28.0703603	227	2.42759117	17
ENSMUSG00	1.2002762	2.22049884	17	1.66571369	13	0.34679874	2
ENSMUSG00	2.18522027	2.72804144	21	3.63989288	29	2.01143269	14
ENSMUSG00	1.705671	3.10869838	24	2.28264469	18	0.34679874	2
ENSMUSG00	3.64483351	4.37755486	34	7.21809265	58	0.76295723	5
ENSMUSG00	3.53753744	4.25066921	33	6.84793406	55	0.62423773	4
ENSMUSG00	12.8391855	18.0812049	142	21.7776642	176	2.15015218	15
ENSMUSG00	18.1298389	19.7307183	155	37.3243253	302	3.12118865	22
ENSMUSG00	3.59173916	6.02706829	47	5.24391347	42	2.01143269	14
ENSMUSG00	2.81275144	3.87001227	30	4.50359627	36	0.34679874	2
ENSMUSG00	5.66982648	10.2142947	80	7.95840985	64	1.87271319	13
ENSMUSG00	3.16202085	4.75821181	37	4.87375487	39	0.48551823	3
ENSMUSG00	28.0572834	34.8301104	274	50.773421	411	3.95350563	28
ENSMUSG00	120.161608	200.16211	1577	166.633062	1350	20.3224061	146
ENSMUSG00	34.5117468	44.6003053	351	64.8394477	525	16.1608212	116
ENSMUSG00	1.57613588	2.72804144	21	2.03587229	16	1.17911571	8
ENSMUSG00	1.25004637	1.8398419	14	2.03587229	16	0.76295723	5
ENSMUSG00	3.16523625	3.99689792	31	5.98423066	48	1.5952742	11
ENSMUSG00	1.87305337	2.72804144	21	3.02296188	24	0.34679874	2
ENSMUSG00	4.41108243	6.53461088	51	7.46486505	60	1.7339937	12
ENSMUSG00	27.0241419	33.4343683	263	50.4032624	408	5.20198109	37
ENSMUSG00	2.65400146	3.48935533	27	4.62698247	37	0.48551823	3
ENSMUSG00	15.7209604	26.4556576	208	22.271209	180	3.25990815	23
ENSMUSG00	3.00349593	5.13886875	40	4.13343767	33	0.62423773	4
ENSMUSG00	1.2174501	1.5860706	12	2.15925849	17	0.76295723	5
ENSMUSG00	86.5449172	129.233033	1018	132.084926	1070	15.6059433	112
ENSMUSG00	1.68018244	2.60115579	20	2.65280328	21	0.48551823	3
ENSMUSG00	7.88657265	10.2142947	80	13.3874026	108	1.17911571	8
ENSMUSG00	1.11571913	2.0936132	16	1.41894129	11	0.48551823	3
ENSMUSG00	9.8601673	13.6402072	107	15.2381956	123	1.31783521	9
ENSMUSG00	1.3375619	1.8398419	14	2.28264469	18	0.76295723	5
ENSMUSG00	4.30907837	6.28083959	49	6.97132025	56	1.04039622	7
ENSMUSG00	3.88534995	3.48935533	27	8.57534084	69	2.28887168	16
ENSMUSG00	13.7549695	16.4316914	129	26.2195673	212	3.53734714	25
ENSMUSG00	5.86685941	8.9454382	70	8.57534084	69	1.04039622	7
ENSMUSG00	23.3887429	44.2196484	348	28.4405189	230	6.58917605	47
ENSMUSG00	28.1954742	31.9117405	251	54.8451655	444	16.1608212	116
ENSMUSG00	15.6886657	22.9028595	180	25.4792501	206	4.50838361	32
ENSMUSG00	65.5850422	67.6934933	533	137.884078	1117	29.3391733	211
ENSMUSG00	1.30496563	1.5860706	12	2.40603088	19	0.76295723	5
ENSMUSG00	2.86815269	3.74312662	29	5.12052727	41	1.31783521	9
ENSMUSG00	13.6007823	21.3802317	168	18.9397816	153	2.56631067	18
ENSMUSG00	43.6015211	56.5275563	445	77.42484	627	21.2934426	153
ENSMUSG00	5.95707424	7.04215347	55	11.0430648	89	1.4565547	10

ENSMUSG00	2.12288431	3.23558403	25	3.26973428	26	0.90167672	6
ENSMUSG00	2.3790071	3.87001227	30	3.14634808	25	0.48551823	3
ENSMUSG00	2.33051165	3.48935533	27	3.63989288	29	0.90167672	6
ENSMUSG00	120.753563	147.37768	1161	211.915797	1717	28.2294174	203
ENSMUSG00	162.416517	237.720262	1873	234.372085	1899	33.6394777	242
ENSMUSG00	1.96131879	2.72804144	21	3.26973428	26	0.76295723	5
ENSMUSG00	1.98876597	2.85492708	22	3.14634808	25	1.17911571	8
ENSMUSG00	1.59387565	2.22049884	17	2.65280328	21	0.62423773	4
ENSMUSG00	329.381739	365.240338	2878	614.401579	4979	82.1913012	592
ENSMUSG00	3.55059618	4.75821181	37	5.73745826	46	0.76295723	5
ENSMUSG00	10.248591	15.7972632	124	14.251106	115	2.01143269	14
ENSMUSG00	5.13056427	6.28083959	49	9.31565804	75	2.70503017	19
ENSMUSG00	17.3799801	25.9481151	204	25.1090915	203	3.53734714	25
ENSMUSG00	7.34120997	10.087409	79	10.9196786	88	1.17911571	8
ENSMUSG00	3.00545455	4.75821181	37	4.38021007	35	1.17911571	8
ENSMUSG00	13.4438354	16.6854627	131	22.7647538	184	2.70503017	19
ENSMUSG00	2.42796839	2.98181273	23	4.25682387	34	1.5952742	11
ENSMUSG00	3.18211037	4.88509746	38	4.75036867	38	1.5952742	11
ENSMUSG00	2.95080319	4.88509746	38	3.76327908	30	0.62423773	4
ENSMUSG00	7.75955329	11.4831512	90	11.5366096	93	1.87271319	13
ENSMUSG00	2.5389977	2.47427014	19	5.24391347	42	1.4565547	10
ENSMUSG00	268.556467	282.891553	2229	505.081406	4093	64.8513642	467
ENSMUSG00	15.0521557	18.8425188	148	26.7131121	216	5.20198109	37
ENSMUSG00	6.74651228	10.7218373	84	9.68581664	78	2.70503017	19
ENSMUSG00	4.07276506	5.13886875	40	6.60116166	53	3.25990815	23
ENSMUSG00	1.62515616	2.34738449	18	2.40603088	19	1.17911571	8
ENSMUSG00	14.1030614	19.476947	153	22.3945952	181	3.95350563	28
ENSMUSG00	1207.28239	1713.90789	13507	1714.38954	13894	296.096764	2134
ENSMUSG00	3.20890775	5.64641134	44	3.88666527	31	2.01143269	14
ENSMUSG00	23.0426336	32.2923975	254	36.7073943	297	11.8605169	85
ENSMUSG00	4.94571003	7.04215347	55	7.71163745	62	2.70503017	19
ENSMUSG00	7.39548462	11.3562655	89	10.54952	85	2.15015218	15
ENSMUSG00	4.42797449	7.04215347	55	6.23100306	50	2.01143269	14
ENSMUSG00	3.65301105	4.63132616	36	5.86084446	47	0.76295723	5
ENSMUSG00	1.92719785	2.98181273	23	2.77618948	22	0.76295723	5
ENSMUSG00	7.46900236	9.32609514	73	12.7704716	103	2.15015218	15
ENSMUSG00	11.8563598	15.5434919	122	18.6930092	151	2.70503017	19
ENSMUSG00	3.22087351	5.13886875	40	4.38021007	35	1.04039622	7
ENSMUSG00	5.79556775	6.28083959	49	11.0430648	89	3.12118865	22
ENSMUSG00	2.39822176	3.87001227	30	3.14634808	25	1.5952742	11
ENSMUSG00	1.60656641	2.22049884	17	2.52941708	20	0.90167672	6
ENSMUSG00	42.1471022	47.1380183	371	76.3143642	618	11.7217974	84
ENSMUSG00	5.19439123	8.4378956	66	6.97132025	56	2.01143269	14
ENSMUSG00	120.723198	131.516974	1036	228.819706	1854	62.4931328	450
ENSMUSG00	3.37619003	4.63132616	36	5.36729966	43	1.5952742	11
ENSMUSG00	2.90397532	3.74312662	29	4.75036867	38	0.90167672	6
ENSMUSG00	4.40607106	5.2657544	41	7.34147885	59	1.04039622	7
ENSMUSG00	4.99485528	6.78838218	53	7.95840985	64	2.28887168	16
ENSMUSG00	15.4925603	22.1415456	174	23.5050709	190	7.69893201	55
ENSMUSG00	24.409321	41.1743928	324	30.2913119	245	7.83765151	56
ENSMUSG00	2.52306664	3.74312662	29	3.63989288	29	0.90167672	6
ENSMUSG00	5.44092463	8.6916669	68	6.84793406	55	1.31783521	9
ENSMUSG00	19.9563978	16.0510345	126	44.2339524	358	9.77972445	70
ENSMUSG00	3.99129837	4.88509746	38	6.84793406	55	2.01143269	14
ENSMUSG00	5.62792846	7.29592477	57	9.19227184	74	2.15015218	15

ENSMUSG00	6.28412476	9.70675209	76	8.20518225	66	1.5952742	11
ENSMUSG00	5.52448187	8.56478125	67	7.34147885	59	1.5952742	11
ENSMUSG00	11.7738505	15.162835	119	19.3099402	156	5.34070058	38
ENSMUSG00	4.37308191	5.0119831	39	7.83502365	63	2.01143269	14
ENSMUSG00	6.1842095	10.087409	79	7.83502365	63	2.01143269	14
ENSMUSG00	4.02363771	5.77329699	45	5.61407206	45	1.04039622	7
ENSMUSG00	9.75033978	13.8939785	109	13.8809474	112	2.70503017	19
ENSMUSG00	145.632389	197.497511	1556	210.435163	1705	40.991611	295
ENSMUSG00	5.08659701	6.78838218	53	7.71163745	62	1.4565547	10
ENSMUSG00	6.66014129	8.9454382	70	10.4261338	84	2.98246916	21
ENSMUSG00	5.22898896	7.42281042	58	7.71163745	62	2.01143269	14
ENSMUSG00	64.8443183	77.9712308	614	109.381866	886	40.159294	289
ENSMUSG00	26.0040011	34.5763391	272	38.5581872	312	6.86661504	49
ENSMUSG00	2.16360608	3.10869838	24	3.14634808	25	0.90167672	6
ENSMUSG00	3.67999938	5.13886875	40	5.49068586	44	1.4565547	10
ENSMUSG00	14.9784205	16.4316914	129	26.8364983	217	9.36356596	67
ENSMUSG00	5.69571554	7.04215347	55	8.69872704	70	4.9245421	35
ENSMUSG00	231.23317	329.458586	2596	316.423908	2564	73.451973	529
ENSMUSG00	4.05721766	4.88509746	38	6.60116166	53	1.17911571	8
ENSMUSG00	16.9826144	26.9632002	212	20.2970298	164	4.09222512	29
ENSMUSG00	10.666906	14.2746354	112	16.3486714	132	6.31173705	45
ENSMUSG00	5.67879854	7.80346736	61	8.57534084	69	2.56631067	18
ENSMUSG00	53.5402588	72.2613766	569	76.190978	617	14.2187483	102
ENSMUSG00	37.4936872	37.6215947	296	68.9111922	558	10.7507609	77
ENSMUSG00	6.00658053	7.42281042	58	9.68581664	78	2.01143269	14
ENSMUSG00	89.5953657	102.20639	805	152.813808	1238	31.4199658	226
ENSMUSG00	3.69858913	5.2657544	41	5.36729966	43	1.7339937	12
ENSMUSG00	34.9659851	38.8904512	306	60.5209307	490	11.5830779	83
ENSMUSG00	27.300321	39.6517651	312	38.5581872	312	12.5541144	90
ENSMUSG00	5.91461601	8.31100996	65	8.20518225	66	4.50838361	32
ENSMUSG00	13.5062776	24.5523729	193	14.4978784	117	6.86661504	49
ENSMUSG00	2.96599356	5.13886875	40	3.39312048	27	1.31783521	9
ENSMUSG00	7.94718604	10.5949516	83	12.0301544	97	3.12118865	22
ENSMUSG00	10.6326526	11.8638081	93	18.569623	150	4.09222512	29
ENSMUSG00	88.3159232	122.761865	967	123.20112	998	28.6455759	206
ENSMUSG00	5.48951274	6.40772523	50	8.94549944	72	1.5952742	11
ENSMUSG00	4.35875945	5.0119831	39	7.46486505	60	2.42759117	17
ENSMUSG00	2.98656682	4.37755486	34	4.13343767	33	1.31783521	9
ENSMUSG00	5.93560524	8.81855255	69	7.83502365	63	1.87271319	13
ENSMUSG00	4.02215413	6.40772523	50	4.99714107	40	2.56631067	18
ENSMUSG00	4.16594753	5.39264005	42	6.35438926	51	1.4565547	10
ENSMUSG00	10.3697311	11.4831512	90	18.1994644	147	5.34070058	38
ENSMUSG00	20.1547252	28.1051711	221	29.1808361	236	10.4733219	75
ENSMUSG00	3.74126774	6.53461088	51	4.13343767	33	1.4565547	10
ENSMUSG00	8.02891883	12.4982363	98	10.1793614	82	2.98246916	21
ENSMUSG00	5.59096708	7.93035301	62	7.95840985	64	2.70503017	19
ENSMUSG00	7.62358741	11.8638081	93	9.80920284	79	3.39862764	24
ENSMUSG00	8.93053766	13.7670928	108	11.4132234	92	3.25990815	23
ENSMUSG00	6.34828516	7.16903912	56	10.9196786	88	3.12118865	22
ENSMUSG00	77.2082869	89.1371679	702	129.863975	1052	45.9855128	331
ENSMUSG00	2.38654877	3.74312662	29	3.02296188	24	1.17911571	8
ENSMUSG00	5.62513086	6.78838218	53	9.06888564	73	2.15015218	15
ENSMUSG00	4.07230796	4.50444051	35	6.97132025	56	1.4565547	10
ENSMUSG00	23.5722888	24.5523729	193	42.753318	346	10.6120414	76
ENSMUSG00	6.92332376	9.32609514	73	9.93258904	80	2.28887168	16

ENSMUSG00	9.64416856	13.3864359	105	13.8809474	112	4.64710311	33
ENSMUSG00	448.155703	546.940587	4310	663.3859	5376	143.366599	1033
ENSMUSG00	16.6282116	23.1566308	182	23.2582985	188	5.89557857	42
ENSMUSG00	11.7370517	14.1477498	111	18.569623	150	3.95350563	28
ENSMUSG00	52.9203807	64.0138095	504	84.4578533	684	21.0160036	151
ENSMUSG00	11.4275256	15.162835	119	16.9656024	137	4.64710311	33
ENSMUSG00	10.6359813	14.6552924	115	14.251106	115	2.84374966	20
ENSMUSG00	1117.3492	1356.21725	10688	1786.20031	14476	721.133298	5198
ENSMUSG00	74.8078654	75.4335178	594	135.292967	1096	29.0617343	209
ENSMUSG00	4.38889022	6.02706829	47	6.23100306	50	1.7339937	12
ENSMUSG00	36.6108863	45.7422762	360	56.2024137	455	14.0800288	101
ENSMUSG00	10.0337437	13.6402072	107	14.4978784	117	4.50838361	32
ENSMUSG00	5.61813196	5.77329699	45	10.0559752	81	2.15015218	15
ENSMUSG00	59.5504232	83.0466567	654	79.1522468	641	18.9352112	136
ENSMUSG00	3.88764467	5.0119831	39	5.86084446	47	1.7339937	12
ENSMUSG00	2.93568979	3.99689792	31	4.13343767	33	2.01143269	14
ENSMUSG00	16.0159953	18.9694044	149	25.8494087	209	7.00533453	50
ENSMUSG00	9.28776829	12.2444651	96	13.2640164	107	3.12118865	22
ENSMUSG00	8.45963178	13.1326646	103	10.3027476	83	3.12118865	22
ENSMUSG00	4.09374734	5.77329699	45	5.61407206	45	1.7339937	12
ENSMUSG00	65.1902056	92.8168517	731	81.3731984	659	18.6577722	134
ENSMUSG00	5.27650252	7.16903912	56	7.46486505	60	2.28887168	16
ENSMUSG00	8.52579185	11.1024942	87	12.5236992	101	3.81478613	27
ENSMUSG00	11.4636074	16.939234	133	14.3744922	116	3.95350563	28
ENSMUSG00	12.3234994	17.1930053	135	15.9785128	129	3.67606664	26
ENSMUSG00	3.84441634	5.0119831	39	5.61407206	45	2.42759117	17
ENSMUSG00	75.0888895	108.550672	855	92.9715011	753	24.206552	174
ENSMUSG00	11.5598641	14.9090637	117	16.71883	135	4.23094462	30
ENSMUSG00	3.96062884	5.64641134	44	5.24391347	42	1.5952742	11
ENSMUSG00	35.2283152	44.0927627	347	49.539559	401	32.2522827	232
ENSMUSG00	5.94406461	7.93035301	62	8.20518225	66	2.01143269	14
ENSMUSG00	3.35215321	4.12378357	32	5.12052727	41	2.15015218	15
ENSMUSG00	8.93583146	11.8638081	93	12.6470854	102	3.53734714	25
ENSMUSG00	32.3727756	41.1743928	324	47.4419936	384	12.8315534	92
ENSMUSG00	358.039398	507.732921	4001	445.732645	3612	128.384893	925
ENSMUSG00	119.380189	161.842644	1275	159.106504	1289	43.2111229	311
ENSMUSG00	17.2571696	24.0448303	189	23.6284571	191	8.39252949	60
ENSMUSG00	3.87101355	4.50444051	35	6.23100306	50	2.01143269	14
ENSMUSG00	9.18323973	12.2444651	96	12.400313	100	2.84374966	20
ENSMUSG00	3.44677646	3.87001227	30	5.61407206	45	2.28887168	16
ENSMUSG00	425.227867	552.904212	4357	565.170485	4580	146.695867	1057
ENSMUSG00	36.5901568	45.7422762	360	52.9943726	429	12.9702728	93
ENSMUSG00	6.29966696	9.07232385	71	8.20518225	66	2.70503017	19
ENSMUSG00	17.6333492	25.8212294	203	21.654278	175	5.75685907	41
ENSMUSG00	26.9178328	34.8301104	274	38.9283458	315	11.8605169	85
ENSMUSG00	54.9336788	50.5639308	398	102.10208	827	35.7202701	257
ENSMUSG00	46.9499917	64.902009	511	61.8781789	501	18.1028942	130
ENSMUSG00	112.912833	156.513447	1233	148.248518	1201	46.9565493	338
ENSMUSG00	3.67136879	4.12378357	32	5.98423066	48	2.15015218	15
ENSMUSG00	16.6363424	18.2080905	143	26.5897259	215	5.47942008	39
ENSMUSG00	4.86668102	7.29592477	57	5.86084446	47	3.67606664	26
ENSMUSG00	5.51313581	8.05723866	63	6.97132025	56	2.42759117	17
ENSMUSG00	8.9630287	11.7369225	92	12.7704716	103	4.7858226	34
ENSMUSG00	3.20394441	4.37755486	34	4.38021007	35	1.7339937	12
ENSMUSG00	22.6993864	29.1202563	229	31.6485601	256	7.976371	57

ENSMUSG00	10.1256122	11.9906938	94	15.484968	125	4.09222512	29
ENSMUSG00	26.0974203	32.5461688	256	36.9541667	299	8.80868798	63
ENSMUSG00	8.25067252	11.3562655	89	11.166451	90	4.23094462	30
ENSMUSG00	317.321451	339.22878	2673	508.906379	4124	127.136418	916
ENSMUSG00	7.11994591	7.67658172	60	11.6599958	94	5.06326159	36
ENSMUSG00	6.32722296	7.93035301	62	9.31565804	75	3.25990815	23
ENSMUSG00	19.8150563	22.6490882	178	30.7848567	249	7.69893201	55
ENSMUSG00	99.3388104	135.450429	1067	125.298685	1015	34.1943557	246
ENSMUSG00	127.442692	150.042279	1182	196.492522	1592	74.5617289	537
ENSMUSG00	7.29605196	9.83363773	77	9.80920284	79	2.98246916	21
ENSMUSG00	9.5194024	11.8638081	93	14.0043336	113	5.34070058	38
ENSMUSG00	36.8415221	50.6908165	399	47.9355384	388	14.9123458	107
ENSMUSG00	9.09010014	10.3411803	81	14.0043336	113	7.00533453	50
ENSMUSG00	16.7978813	20.2382609	159	25.3558639	205	8.53124899	61
ENSMUSG00	325.741707	420.435595	3313	432.530321	3505	126.858979	914
ENSMUSG00	8.54827574	9.19920949	72	13.634175	110	6.86661504	49
ENSMUSG00	48.6666343	67.0590651	528	60.6443169	491	16.2995407	117
ENSMUSG00	6.58205487	7.93035301	62	9.68581664	78	2.56631067	18
ENSMUSG00	4.29413505	6.28083959	49	5.24391347	42	3.12118865	22
ENSMUSG00	44.3448079	45.9960475	362	74.8337298	606	23.651674	170
ENSMUSG00	668.390116	826.089013	6510	959.512778	7776	333.551027	2404
ENSMUSG00	30.8172287	35.8451956	282	45.837973	371	11.1669194	80
ENSMUSG00	328.531155	469.413455	3699	384.039545	3112	121.726357	877
ENSMUSG00	10.0778099	12.7520076	100	14.1277198	114	7.69893201	55
ENSMUSG00	3.90076939	5.13886875	40	5.36729966	43	2.56631067	18
ENSMUSG00	12.8591072	19.3500613	152	15.3615818	124	6.03429806	43
ENSMUSG00	10.0834178	13.2595502	104	13.634175	110	4.09222512	29
ENSMUSG00	5.42816273	7.42281042	58	7.09470645	57	2.28887168	16
ENSMUSG00	14.7871684	19.476947	153	19.6800988	159	5.47942008	39
ENSMUSG00	31.9668675	34.4494535	271	51.6371244	418	14.3574678	103
ENSMUSG00	115.348313	148.26588	1168	155.528304	1260	47.2339883	340
ENSMUSG00	3.71438127	4.88509746	38	5.12052727	41	2.01143269	14
ENSMUSG00	4.72043959	5.2657544	41	7.34147885	59	3.53734714	25
ENSMUSG00	24.4648783	25.5674581	201	40.4089802	327	16.8544187	121
ENSMUSG00	5.29685993	7.16903912	56	7.09470645	57	2.84374966	20
ENSMUSG00	56.6473368	58.5577266	461	94.9456803	769	34.6105142	249
ENSMUSG00	9.87609026	11.4831512	90	14.9914232	121	4.50838361	32
ENSMUSG00	5.12066297	6.66149653	52	6.97132025	56	2.15015218	15
ENSMUSG00	7.36389578	8.4378956	66	11.166451	90	2.98246916	21
ENSMUSG00	5.21459357	7.93035301	62	6.10761686	49	2.84374966	20
ENSMUSG00	4.1962623	6.28083959	49	4.99714107	40	2.15015218	15
ENSMUSG00	28.0635669	40.2861933	317	33.6227393	272	10.6120414	76
ENSMUSG00	11.8305953	14.2746354	112	17.4591472	141	6.03429806	43
ENSMUSG00	3.97452834	5.2657544	41	5.36729966	43	2.01143269	14
ENSMUSG00	9.71369096	10.9756086	86	15.1148094	122	5.89557857	42
ENSMUSG00	20.8907087	23.791059	187	31.6485601	256	15.8833823	114
ENSMUSG00	56.9963615	72.3882623	570	79.5224054	644	28.9230149	208
ENSMUSG00	3.2724293	4.25066921	33	4.50359627	36	2.01143269	14
ENSMUSG00	10.1980305	12.4982363	98	14.7446508	119	4.9245421	35
ENSMUSG00	4.96228447	3.61624097	28	3.02296188	24	5.61813958	40
ENSMUSG00	12.0441766	7.16903912	56	7.95840985	64	21.0160036	151
ENSMUSG00	9.83628856	5.5195257	43	6.97132025	56	16.5769797	119
ENSMUSG00	19.2011071	9.83363773	77	15.484968	125	28.0906979	202
ENSMUSG00	15.471728	9.45298079	74	10.6729062	86	21.1547231	152
ENSMUSG00	3.16098863	2.0936132	16	2.03587229	16	3.81478613	27

ENSMUSG00	19.1620141	9.96052338	78	14.251106	115	31.0038073	223
ENSMUSG00	7.18761439	3.74312662	29	4.99714107	40	12.8315534	92
ENSMUSG00	490.736395	277.562355	2187	348.380933	2823	755.119575	5443
ENSMUSG00	12.9520699	12.3713507	97	4.87375487	39	20.8772841	150
ENSMUSG00	83.970739	56.5275563	445	48.1823108	390	142.395562	1026
ENSMUSG00	5.4060562	3.99689792	31	2.77618948	22	8.80868798	63
ENSMUSG00	45.7271112	47.3917896	373	16.3486714	132	60.5510599	436
ENSMUSG00	4.11411521	2.47427014	19	2.77618948	22	4.64710311	33
ENSMUSG00	7.16350754	3.74312662	29	5.36729966	43	10.1958829	73
ENSMUSG00	3.0565081	2.0936132	16	1.78909989	14	3.95350563	28
ENSMUSG00	18.3833473	12.3713507	97	10.1793614	82	15.6059433	112
ENSMUSG00	4.51066617	2.47427014	19	3.14634808	25	6.17301756	44
ENSMUSG00	26.0626857	17.1930053	135	14.251106	115	43.6272814	314
ENSMUSG00	6.08814446	3.23558403	25	4.38021007	35	7.69893201	55
ENSMUSG00	6.09610215	3.61624097	28	3.88666527	31	8.66996848	62
ENSMUSG00	2.65839142	1.71295625	13	1.54232749	12	3.81478613	27
ENSMUSG00	33.9542032	19.6038326	154	21.4075056	173	52.9214876	381
ENSMUSG00	20.4436517	11.1024942	87	13.5107888	109	32.1135633	231
ENSMUSG00	6.19386787	3.10869838	24	4.25682387	34	10.3346024	74
ENSMUSG00	2.17407498	1.45918495	11	1.17216889	9	3.12118865	22
ENSMUSG00	3.16513094	2.0936132	16	1.66571369	13	4.9245421	35
ENSMUSG00	3.79331597	2.47427014	19	2.03587229	16	5.75685907	41
ENSMUSG00	7.16028297	2.22049884	17	6.97132025	56	11.4443584	82
ENSMUSG00	3.71772336	2.85492708	22	1.66571369	13	5.34070058	38
ENSMUSG00	26.7652655	18.0812049	142	13.3874026	108	43.2111229	311
ENSMUSG00	3.66741221	2.60115579	20	1.78909989	14	5.06326159	36
ENSMUSG00	2.46006243	1.45918495	11	1.41894129	11	3.39862764	24
ENSMUSG00	8.158299	5.39264005	42	3.88666527	31	13.3864313	96
ENSMUSG00	3.02982875	1.5860706	12	1.91248609	15	4.23094462	30
ENSMUSG00	4.73281094	3.10869838	24	2.40603088	19	5.61813958	40
ENSMUSG00	50.3357395	15.9241488	125	44.9742696	364	50.8406952	366
ENSMUSG00	2.88093605	1.45918495	11	1.78909989	14	4.09222512	29
ENSMUSG00	1.95275704	0.95164236	7	1.17216889	9	3.25990815	23
ENSMUSG00	4.08147094	1.45918495	11	3.02296188	24	7.14405403	51
ENSMUSG00	2.8565723	1.33229931	10	1.78909989	14	3.39862764	24
ENSMUSG00	3.58183041	2.72804144	21	1.17216889	9	6.45045655	46
ENSMUSG00	8.14268387	6.53461088	51	2.65280328	21	12.6928339	91
ENSMUSG00	14.964462	8.9454382	70	5.49068586	44	32.2522827	232
ENSMUSG00	4.65027153	2.34738449	18	2.40603088	19	8.1150905	58
ENSMUSG00	8.61955357	5.90018264	46	3.14634808	25	15.0510653	108
ENSMUSG00	1.58736161	0.95164236	7	0.6786241	5	2.70503017	19
ENSMUSG00	5.40281949	1.71295625	13	3.76327908	30	10.1958829	73
ENSMUSG00	3.50836425	1.96672755	15	1.54232749	12	5.61813958	40
ENSMUSG00	3.98063278	1.71295625	13	2.15925849	17	7.14405403	51
ENSMUSG00	2.07447045	0.82475671	6	1.17216889	9	2.42759117	17
ENSMUSG00	1.59842762	0.82475671	6	0.6786241	5	2.56631067	18
ENSMUSG00	1.99360378	0.95164236	7	0.92539649	7	2.84374966	20
ENSMUSG00	1.75115365	0.95164236	7	0.6786241	5	2.84374966	20
ENSMUSG00	3.14009424	2.0936132	16	0.92539649	7	2.98246916	21
ENSMUSG00	10.3625615	6.15395394	48	3.51650668	28	16.8544187	121
ENSMUSG00	7.53301697	1.5860706	12	6.23100306	50	12.5541144	90
ENSMUSG00	4.17438957	1.71295625	13	1.78909989	14	8.39252949	60
ENSMUSG00	2.08232806	0.57098542	4	1.41894129	11	2.98246916	21
ENSMUSG00	2.37704618	2.22049884	17	0.4318517	3	2.98246916	21
ENSMUSG00	1.53027661	0.44409977	3	0.92539649	7	2.42759117	17

ENSMUSG00	6.52166137	1.96672755	15	2.65280328	21	4.7858226	34
ENSMUSG00	2.40127976	1.33229931	10	0.5552379	4	3.12118865	22
ENSMUSG00	1.17211387	0.31721412	2	0.5552379	4	1.5952742	11
ENSMUSG00	1.57274811	0.57098542	4	0.5552379	4	2.42759117	17
ENSMUSG00	0.85132158	0.19032847	1	0.4318517	3	1.5952742	11
ENSMUSG00	1.40051464	1.07852801	8	0.1850793	1	2.42759117	17
ENSMUSG00	1.7803685	0.95164236	7	0.3084655	2	3.53734714	25
ENSMUSG00	1.09495556	0.31721412	2	0.3084655	2	2.56631067	18
ENSMUSG00	1.3287982	0.57098542	4	0.3084655	2	1.5952742	11
ENSMUSG00	8.32772329	2.34738449	18	2.15925849	17	10.0571634	72
ENSMUSG00	0.6923627	0.44409977	3	0.0616931	0	1.17911571	8
ENSMUSG00	0.79848592	0.19032847	1	0.1850793	1	1.7339937	12
ENSMUSG00	0.84158928	0.06344282	0	0.5552379	4	1.4565547	10
ENSMUSG00	0.81470102	0.19032847	1	0.1850793	1	1.17911571	8
ENSMUSG00	0.79640232	0.44409977	3	0.0616931	0	1.5952742	11
ENSMUSG00	1.06130041	0.06344282	0	0.6786241	5	1.17911571	8
ENSMUSG00	0.72114359	0.31721412	2	0.0616931	0	1.31783521	9
ENSMUSG00	1.05777607	0.06344282	0	0.5552379	4	2.01143269	14
ENSMUSG00	0.97528465	0.06344282	0	0.4318517	3	2.01143269	14
ENSMUSG00	1.09170606	0.06344282	0	0.5552379	4	1.7339937	12
ENSMUSG00	0.81457605	0.06344282	0	0.3084655	2	1.5952742	11
ENSMUSG00	4.08475275	4.50444051	35	0.0616931	0	6.86661504	49
ENSMUSG00	0.9444381	0.06344282	0	0.3084655	2	2.01143269	14
ENSMUSG00	2.30450697	1.45918495	11	0.0616931	0	5.06326159	36
ENSMUSG00	4.86343742	0.06344282	0	3.76327908	30	6.58917605	47
ENSMUSG00	11.3726659	12.7520076	100	0.0616931	0	17.1318577	123
ENSMUSG00	0.69238064	0.06344282	0	0.0616931	0	1.4565547	10
ENSMUSG00	12.6195055	13.6402072	107	0.0616931	0	17.4092967	125
ENSMUSG00	2.4189235	0.06344282	0	0.6786241	5	4.64710311	33
ENSMUSG00	0.71820308	0.06344282	0	0.0616931	0	1.4565547	10
ENSMUSG00	3.33221413	1.20541366	9	0.0616931	0	3.95350563	28
ENSMUSG00	5.49255162	2.85492708	22	0.0616931	0	9.08612697	65
ENSMUSG00	0.76984794	0.06344282	0	0.0616931	0	1.4565547	10
ENSMUSG00	3.94540379	0.95164236	7	0.0616931	0	6.86661504	49
ENSMUSG00	0.98528485	0.06344282	0	0.0616931	0	1.5952742	11
ENSMUSG00	5.3458091	0.06344282	0	0.0616931	0	9.22484646	66

Norm_KI_3	Raw_KI_3	ave_WT	ave_KI	foldChange	LogFC-KIvsWT	logFC	P.Value
0.05164487	0	9.81267166	0.06050231	163.775536	-7.35557606	7.35557606	5.6966E-05
0.05164487	0	3.25265915	0.06050231	54.3497346	-5.76420109	5.76420109	0.00027109
0.05164487	0	2.05774384	0.06050231	33.5692628	-5.06906895	5.06906895	0.00100891
0.05164487	0	24.2960383	10.2563852	32.8098809	-5.03605845	5.03605845	0.03357036
0.05164487	0	10.3902032	1.30897777	30.7044755	-4.94037705	4.94037705	0.03014315
0.05164487	0	1.81622062	0.06050231	30.2091946	-4.91691582	4.91691582	0.00089988
0.05164487	0	5.16119305	0.26858155	29.1101038	-4.86344808	4.86344808	0.01119075
0.05164487	0	1.5606996	0.06050231	25.8434056	-4.69172429	4.69172429	0.00136116
0.05164487	0	3.72520726	0.1992218	23.6239538	-4.56217854	4.56217854	0.01585665
0.05164487	0	2.25682094	0.12986206	21.471061	-4.42432158	4.42432158	0.00291474
0.05164487	0	1.190541	0.06050231	19.7225012	-4.30177062	4.30177062	0.00235842
0.05164487	0	1.12534845	0.06050231	18.7955588	-4.2323199	4.2323199	0.0025011
0.05164487	0	4.84793112	0.75409979	18.2504493	-4.18986007	4.18986007	0.03244104
1.60099088	15	6.30711607	0.83517531	15.9734744	-3.99760624	3.99760624	0.01307253
1.60099088	15	6.30711607	0.83517531	15.9734744	-3.99760624	3.99760624	0.01307253
0.05164487	0	4.1058642	0.89281928	15.1686771	-3.92302337	3.92302337	0.03404887
0.1549346	1	1.37387057	0.11214717	13.1728417	-3.71949469	3.71949469	0.00556475
0.36151407	3	1.99605074	0.21543691	12.3703823	-3.62881818	3.62881818	0.01046885
0.05164487	0	2.98838951	0.89281928	11.2964722	-3.4978004	3.4978004	0.04468672
0.1549346	1	2.17588087	0.18150692	10.9147975	-3.44821346	3.44821346	0.01602577
0.05164487	0	1.12709818	0.12986206	10.8374927	-3.43795911	3.43795911	0.01188501
0.87796274	8	2.80331021	0.47366124	10.2106987	-3.35200968	3.35200968	0.02905011
0.25822434	2	1.37387057	0.16379204	10.2036393	-3.3510119	3.3510119	0.01207491
0.36151407	3	1.50425567	0.21543691	9.39147189	-3.23135128	3.23135128	0.01727475
0.67138327	6	2.05949357	0.37037151	9.38049135	-3.22966349	3.22966349	0.02478931
0.25822434	2	1.25048437	0.16379204	9.34180553	-3.22370141	3.22370141	0.01420244
0.05164487	0	1.56944822	0.3379413	8.42909569	-3.07537786	3.07537786	0.04037645
3.04704715	29	21.2096948	2.32116068	8.42049626	-3.07390526	3.07390526	0.00808719
0.05164487	0	1.12534845	0.1992218	8.40562941	-3.07135585	3.07135585	0.02674209
0.98125247	9	2.44889913	0.52530611	8.20815526	-3.03705802	3.03705802	0.0420265
0.1549346	1	2.24107342	0.32022642	8.08901428	-3.01596391	3.01596391	0.02180408
0.36151407	3	1.25048437	0.21543691	7.89526669	-2.980988	2.980988	0.02442018
1.70428061	16	11.0675303	1.44169816	7.62245417	-2.93025557	2.93025557	0.00034426
0.77467301	7	1.81447089	0.42201638	7.55592931	-2.9176092	2.9176092	0.03762604
0.87796274	8	1.99780047	0.47366124	7.52828036	-2.91232036	2.91232036	0.04153988
0.87796274	8	1.88141317	0.47366124	7.01567591	-2.8105821	2.8105821	0.04920524
0.56809354	5	1.38086947	0.31872664	6.73226296	-2.75109153	2.75109153	0.04833521
0.56809354	5	1.31217747	0.31872664	6.59498081	-2.72136846	2.72136846	0.04554594
0.4648038	4	1.12709818	0.26708178	6.2570293	-2.64547786	2.64547786	0.04677383
0.87796274	8	2.87550166	0.54302099	6.22225649	-2.63743787	2.63743787	0.01644092
3.66678556	35	7.89843585	2.00679215	5.97146675	-2.57808534	2.57808534	0.02313307
1.39441141	13	3.67751195	0.80124533	5.9571714	-2.57462747	2.57462747	0.02994095
0.36151407	3	2.74161711	0.4928759	5.7265309	-2.51766143	2.51766143	0.01662993
0.56809354	5	3.38129453	0.59616563	5.68890525	-2.50815105	2.50815105	0.00578817
0.4648038	4	4.49876922	1.030039	5.60735471	-2.48732034	2.48732034	0.00808599
0.87796274	8	5.21983944	0.88981973	5.20044431	-2.37863489	2.37863489	0.02926119
0.56809354	5	2.37320824	0.45744614	5.17796685	-2.37238573	2.37238573	0.01540026
0.67138327	6	5.78732541	1.27204823	5.12588785	-2.35780192	2.35780192	0.01927421
0.25822434	2	1.50075622	0.30251154	5.09136092	-2.34805134	2.34805134	0.02639623
0.1549346	1	1.12709818	0.25086667	4.90375197	-2.29388601	2.29388601	0.04353456
0.67138327	6	1.93960682	0.43973126	4.87623474	-2.28576758	2.28576758	0.03087807
2.01414981	19	7.32395099	1.52727302	4.83743371	-2.27424189	2.27424189	0.00240143

2.84046769	27	9.90061063	2.07915145	4.80798951	-2.26543375	2.26543375	0.00225864
0.56809354	5	1.75452752	0.38808639	4.79890557	-2.26270542	2.26270542	0.03434345
1.29112168	12	2.75911436	0.74960046	4.72934107	-2.24163919	2.24163919	0.0431026
0.77467301	7	4.84968085	0.97689436	4.71020531	-2.23578994	2.23578994	0.02727276
1.29112168	12	2.68517319	0.74960046	4.65503994	-2.21879355	2.21879355	0.04275789
0.67138327	6	3.57337272	0.78653	4.60659899	-2.20370202	2.20370202	0.00908213
2.42730875	23	7.66961344	1.73385248	4.45330813	-2.15487744	2.15487744	0.00796633
1.70428061	16	5.80132321	1.30297867	4.41554548	-2.14259168	2.14259168	0.00759981
1.80757035	17	4.51101729	1.14654429	4.41544964	-2.14256036	2.14256036	0.01699408
0.36151407	3	1.24873465	0.28479666	4.41003944	-2.14079156	2.14079156	0.04781056
0.67138327	6	2.18812894	0.50909101	4.372253	-2.12837688	2.12837688	0.02290575
7.38521599	71	21.0456122	4.90640358	4.34129827	-2.11812655	2.11812655	0.01187009
0.56809354	5	1.94310627	0.45744614	4.21079532	-2.07409275	2.07409275	0.02968755
0.36151407	3	3.18396716	1.18647338	4.09849829	-2.0350954	2.0350954	0.04021993
1.08454221	10	2.69567153	0.71567047	4.0641279	-2.02294581	2.02294581	0.03199726
2.22072928	21	5.79782376	1.49184325	4.0480453	-2.01722543	2.01722543	0.01780415
2.42730875	23	5.54930163	1.52577324	4.0364326	-2.0130808	2.0130808	0.02474045
9.34772093	90	19.9294345	5.74893656	3.98627107	-1.99503982	1.99503982	0.00805949
12.3431232	119	28.5275218	7.73215594	3.97447441	-1.99076409	1.99076409	0.01573615
1.08454221	10	5.63549088	1.54798745	3.95949855	-1.98531773	1.98531773	0.00518348
2.53059848	24	4.18680427	1.43869861	3.95915304	-1.98519184	1.98519184	0.0476677
2.63388822	25	9.08635226	2.25330071	3.95546825	-1.98384849	1.98384849	0.00199991
2.53059848	24	4.81598334	1.50805836	3.92357376	-1.97216832	1.97216832	0.02912836
22.6720966	219	42.8017657	13.3128011	3.92343803	-1.97211841	1.97211841	0.01668033
93.5288542	905	183.397586	56.9256302	3.89471248	-1.96151683	1.96151683	0.01024797
12.446413	120	54.7198765	14.3036171	3.86523071	-1.95055453	1.95055453	0.0002025
0.36151407	3	2.38195686	0.77031489	3.85307657	-1.94601085	1.94601085	0.03767335
0.36151407	3	1.93785709	0.56223565	3.84302192	-1.94224121	1.94224121	0.03349071
1.08454221	10	4.99056429	1.3399082	3.82152286	-1.93414766	1.93414766	0.00919691
1.39441141	13	2.87550166	0.87060507	3.81527152	-1.93178573	1.93178573	0.03802966
1.91086008	18	6.99973797	1.82242689	3.81501647	-1.93168928	1.93168928	0.00235637
19.0569559	184	41.9188153	12.1294685	3.76430335	-1.91238289	1.91238289	0.00765629
2.01414981	19	4.0581689	1.24983402	3.73504777	-1.9011267	1.9011267	0.03251888
10.8970669	105	24.3634333	7.07848755	3.73050727	-1.89937182	1.89937182	0.00449798
2.11743955	20	4.63615321	1.37083864	3.70966453	-1.89128873	1.89128873	0.02164297
0.36151407	3	1.87266454	0.56223565	3.67961474	-1.87955472	1.87955472	0.0418915
69.2557667	670	130.658979	42.430855	3.66952909	-1.87559493	1.87559493	0.0098427
0.98125247	9	2.62697954	0.73338535	3.65574909	-1.87016705	1.87016705	0.02498324
6.76547758	65	11.8008486	3.97229665	3.65075784	-1.86819598	1.86819598	0.02551387
0.4648038	4	1.75627724	0.47516102	3.62782839	-1.85910621	1.85910621	0.04260763
9.2444312	89	14.4392014	5.2811332	3.58466553	-1.84183851	1.84183851	0.0309261
0.4648038	4	2.06124329	0.61388051	3.54361092	-1.82522021	1.82522021	0.03373888
2.94375742	28	6.62607992	1.99207682	3.52597604	-1.81802267	1.81802267	0.01131743
1.18783194	11	6.03234808	1.73835181	3.48801628	-1.80240678	1.80240678	0.03706179
8.83127226	85	21.3256294	6.1843097	3.4872094	-1.802073	1.802073	0.00635831
4.90626237	47	8.76038952	2.97332929	3.46950917	-1.79473158	1.79473158	0.02203471
14.3056282	138	36.3300837	10.4474021	3.44712807	-1.7853949	1.7853949	0.00301962
9.8641696	95	43.378453	13.0124954	3.43699909	-1.78114947	1.78114947	0.00210421
9.8641696	95	24.1910548	7.18627661	3.42588162	-1.7764753	1.7764753	0.00129084
27.4234244	265	102.788785	28.3812989	3.42501689	-1.7761111	1.7761111	0.00211618
0.4648038	4	1.99605074	0.61388051	3.38231981	-1.75801308	1.75801308	0.04508113
1.29112168	12	4.43182694	1.30447844	3.36794296	-1.7518677	1.7518677	0.01092849
11.5168053	111	20.1600066	7.04155801	3.32039564	-1.73135516	1.73135516	0.01536251
19.1602457	185	66.9761981	20.2268441	3.3003648	-1.7226255	1.7226255	0.0001022
4.28652396	41	9.04260915	2.87153933	3.27435415	-1.71121037	1.71121037	0.01828869

1.08454221	10	3.25265915	0.99310946	3.25279986	-1.70168206	1.70168206	0.01658159
2.01414981	19	3.50818017	1.24983402	3.23256529	-1.69267951	1.69267951	0.04963442
1.29112168	12	3.5646241	1.0963992	3.23179193	-1.69233432	1.69233432	0.01563939
95.4913591	924	179.646739	61.8603883	3.23025895	-1.69164982	1.69164982	0.01033015
143.934244	1393	236.046174	88.7868611	3.22466886	-1.68915102	1.68915102	0.01830076
1.08454221	10	2.99888786	0.92374972	3.21906973	-1.68664383	1.68664383	0.02270869
0.77467301	7	3.00063758	0.97689436	3.21847096	-1.68637545	1.68637545	0.02125088
0.87796274	8	2.43665106	0.75110024	3.21819651	-1.68625242	1.68625242	0.03126004
255.693737	2475	489.820959	168.942519	3.20919303	-1.68221057	1.68221057	0.01229063
2.94375742	28	5.24783503	1.85335732	3.19480496	-1.67572786	1.67572786	0.03275676
8.934562	86	15.0241846	5.47299734	3.1757232	-1.66708517	1.66708517	0.01962889
2.22072928	21	7.79824881	2.46287972	3.17431606	-1.66644578	1.66644578	0.00592329
14.9253666	144	25.5286033	9.23135686	3.16551268	-1.66243917	1.66243917	0.01428428
7.17863652	69	10.5035438	4.17887612	3.1628897	-1.66124324	1.66124324	0.04054697
1.70428061	16	4.56921094	1.44169816	3.14261634	-1.65196616	1.65196616	0.01080315
11.6200951	112	19.7251082	7.16256262	3.13644841	-1.64913183	1.64913183	0.02107537
0.87796274	8	3.6193183	1.23661847	3.13290898	-1.64750286	1.64750286	0.02415459
1.49770114	14	4.81773306	1.54648767	3.12894423	-1.64567594	1.64567594	0.00787779
2.53059848	24	4.32418827	1.57741811	3.11648318	-1.63991893	1.63991893	0.04612039
6.14573918	59	11.5098804	4.00922618	3.11001318	-1.63692069	1.63692069	0.0122813
0.98125247	9	3.8590918	1.21890359	3.10494057	-1.63456565	1.63456565	0.042318
221.401545	2143	393.98648	143.126455	3.08297113	-1.62432138	1.62432138	0.01999533
9.45101067	91	22.7778154	7.32649588	3.07113744	-1.61877308	1.61877308	0.00250629
3.87336503	37	10.203827	3.2891976	3.06448121	-1.61564286	1.61564286	0.00210037
1.29112168	12	5.8700152	2.27551491	3.03456138	-1.601488	1.601488	0.01744789
0.56809354	5	2.37670769	0.87360463	3.03158578	-1.60007264	1.60007264	0.04144254
10.5871977	102	20.9357711	7.27035168	3.00995338	-1.58974114	1.58974114	0.00545832
1104.73535	10695	1714.14872	700.416057	2.98882878	-1.57958025	1.57958025	0.02138232
1.29112168	12	4.76653831	1.65127718	2.98656324	-1.57848627	1.57848627	0.01701629
11.3102259	109	34.4998959	11.5853714	2.98448716	-1.57748305	1.57748305	7.2443E-05
2.32401902	22	7.37689546	2.51452459	2.97345901	-1.57214219	1.57214219	0.00356223
5.52600077	53	10.9528928	3.83807648	2.96184709	-1.56649716	1.56649716	0.00861324
2.42730875	23	6.63657827	2.21937072	2.95562493	-1.5634632	1.5634632	0.00517892
3.35691636	32	5.24608531	2.05993679	2.95448442	-1.56290639	1.56290639	0.04995875
1.18783194	11	2.87900111	0.97539458	2.94133283	-1.55647004	1.55647004	0.03016206
5.62929051	54	11.0482834	3.88972134	2.92997986	-1.55089075	1.55089075	0.01310176
10.483908	101	17.1182505	6.59446909	2.90707999	-1.53957077	1.53957077	0.02029577
2.32401902	22	4.75953941	1.68220762	2.89002233	-1.53108064	1.53108064	0.02234234
2.73717795	26	8.66195221	2.9291833	2.88804726	-1.53009435	1.53009435	0.01201723
0.98125247	9	3.50818017	1.28826334	2.87194259	-1.52202691	1.52202691	0.02464593
0.77467301	7	2.37495796	0.83817486	2.86369316	-1.51787692	1.51787692	0.03839835
33.414229	323	61.7261913	22.5680132	2.84492536	-1.5083908	1.5083908	0.01289165
3.35691636	32	7.70460793	2.68417452	2.84008342	-1.5059333	1.5059333	0.00734263
60.0629804	581	180.16834	61.2780566	2.83792008	-1.50483396	1.50483396	0.0008149
1.91086008	18	4.99931291	1.75306714	2.82373602	-1.49760522	1.49760522	0.01110794
2.22072928	21	4.24674765	1.561203	2.81530663	-1.49329206	1.49329206	0.03361779
3.97665476	38	6.30361663	2.50852549	2.78932751	-1.47991734	1.47991734	0.04692159
2.94375742	28	7.37339601	2.61631455	2.78339059	-1.47684337	1.47684337	0.00549644
8.62469279	83	22.8233083	8.1618124	2.77764143	-1.47386037	1.47386037	0.00022697
18.3339278	177	35.7328524	13.0857897	2.77248164	-1.47117791	1.47117791	0.00541639
1.80757035	17	3.69150975	1.35462353	2.76577215	-1.46768231	1.46768231	0.03003803
4.90626237	47	7.76980048	3.11204879	2.75385468	-1.46145243	1.46145243	0.0373135
9.76087987	94	30.1424935	9.77030216	2.7428179	-1.45565884	1.45565884	0.03486774
2.22072928	21	5.86651576	2.11608098	2.72387019	-1.44565795	1.44565795	0.01235852
3.87336503	37	8.24409831	3.01175861	2.7225764	-1.44497253	1.44497253	0.00935801

5.62929051	54	8.95596717	3.61228235	2.71241223	-1.43957645	1.43957645	0.03067226
4.59639317	44	7.95313005	3.09583368	2.70809116	-1.4372763	1.4372763	0.02292416
7.28192625	70	17.2363876	6.31131342	2.68745875	-1.42624261	1.42624261	0.00160699
2.63388822	25	6.42350338	2.32266045	2.67878402	-1.42157827	1.42157827	0.01655982
4.80297263	46	8.96121634	3.40720266	2.6787712	-1.42157136	1.42157136	0.01634441
3.66678556	35	5.69368453	2.35359089	2.67015943	-1.41692588	1.41692588	0.04345019
8.52140306	82	13.8874629	5.61321661	2.66325513	-1.41319064	1.41319064	0.01784201
133.605271	1293	203.966337	87.298441	2.64987516	-1.4059244	1.4059244	0.01799468
4.3898137	42	7.25000981	2.9231842	2.64390566	-1.4026707	1.4026707	0.02905265
4.28652396	41	9.68578601	3.63449656	2.63322649	-1.39683162	1.39683162	0.00435359
3.77007529	36	7.56722393	2.89075399	2.62495148	-1.39229076	1.39229076	0.01057443
31.864883	308	93.6765482	36.0120885	2.61506718	-1.38684801	1.38684801	0.0003564
24.0148632	232	36.5672632	15.4407391	2.60979493	-1.38393645	1.38393645	0.019302
1.49770114	14	3.12752323	1.19968893	2.60761852	-1.38273283	1.38273283	0.03811069
2.63388822	25	5.31477731	2.04522146	2.60379517	-1.38061596	1.38061596	0.01847345
7.28192625	70	21.6340949	8.32274611	2.59747166	-1.37710801	1.37710801	0.0046803
2.11743955	20	7.87044026	3.52099082	2.58205581	-1.36852019	1.36852019	0.0177743
205.598216	1990	322.941247	139.525094	2.57819702	-1.36636251	1.36636251	0.01273398
3.56349582	34	5.74312956	2.37130577	2.56902171	-1.36121908	1.36121908	0.04567683
16.5780023	160	23.630115	10.3351137	2.56230873	-1.35744431	1.35744431	0.03705982
5.73258024	55	15.3116534	6.02215865	2.55952925	-1.35587849	1.35587849	0.00103694
3.77007529	36	8.1894041	3.16819298	2.55846046	-1.35527594	1.35527594	0.00649516
51.4899324	498	74.2261773	32.8543404	2.54943174	-1.35017571	1.35017571	0.02370377
32.6912008	316	53.2663935	21.7209809	2.53919757	-1.34437265	1.34437265	0.03261541
4.90626237	47	8.55431353	3.45884753	2.53309825	-1.34090303	1.34090303	0.02245039
71.9412998	696	127.510099	51.6806328	2.53301902	-1.34085791	1.34085791	0.00851581
2.42730875	23	5.31652703	2.08065122	2.53126423	-1.33985811	1.33985811	0.01447885
28.8694807	279	49.7056909	20.2262793	2.50857701	-1.32686923	1.32686923	0.0143713
18.4372175	178	39.1049762	15.4956659	2.50510284	-1.32486983	1.32486983	0.00038072
2.63388822	25	8.2580961	3.57113591	2.49236605	-1.31751597	1.31751597	0.00842044
8.10824412	78	19.5251257	7.48742958	2.49020172	-1.31626261	1.31626261	0.00724182
2.01414981	19	4.26599461	1.66599251	2.48435026	-1.31286859	1.31286859	0.03790584
6.04244944	58	11.312553	4.58181905	2.4807684	-1.31078705	1.31078705	0.00838841
8.00495439	77	15.2167155	6.04858976	2.47852726	-1.30948313	1.30948313	0.0144756
78.6551325	761	122.981492	53.6503542	2.4742791	-1.30700825	1.30700825	0.01169537
5.0095521	48	7.67661234	3.30241315	2.46903699	-1.30394845	1.30394845	0.04592184
2.53059848	24	6.23842408	2.47909483	2.46717201	-1.30285831	1.30285831	0.01741921
2.11743955	20	4.25549627	1.71763738	2.46565261	-1.30196955	1.30196955	0.02743674
5.21613157	50	8.3267881	3.54442238	2.46519962	-1.30170447	1.30170447	0.0285365
2.11743955	20	5.70243315	2.34187511	2.45689799	-1.29683796	1.29683796	0.01504236
3.46020609	33	5.87351465	2.4583804	2.45426507	-1.29529107	1.29529107	0.03205725
6.45560838	62	14.8413078	5.89815448	2.43591308	-1.28446266	1.28446266	0.00743668
12.8595719	124	28.6430036	11.6664469	2.4328731	-1.28266107	1.28266107	0.00029391
2.84046769	27	5.33402428	2.1485112	2.43078534	-1.28142249	1.28142249	0.04219721
6.45560838	62	11.3387989	4.71903877	2.42803585	-1.27978972	1.27978972	0.01394139
3.77007529	36	7.94438143	3.23755273	2.42800636	-1.2797722	1.2797722	0.00735778
5.42271104	52	10.8365055	4.41066934	2.42630045	-1.27875821	1.27875821	0.00670364
7.28192625	70	12.5901581	5.2709172	2.42526938	-1.278145	1.278145	0.01330204
4.18323423	40	9.04435888	3.65221144	2.40390318	-1.26537879	1.26537879	0.01373192
43.8464921	424	109.500571	44.9160025	2.40335688	-1.26505089	1.26505089	0.0004628
1.60099088	15	3.38304425	1.3900533	2.39691628	-1.26117952	1.26117952	0.04163107
4.49310343	43	7.92863391	3.32162781	2.3964372	-1.26089113	1.26089113	0.0233094
3.35691636	32	5.73788038	2.40673553	2.39533317	-1.26022634	1.26022634	0.04794586
16.3714228	158	33.6528455	13.4917321	2.39312199	-1.25889394	1.25889394	0.00941468
6.14573918	59	9.62934209	4.21730543	2.38920383	-1.25652994	1.25652994	0.02568989

6.66218785	64	13.6336916	5.65464548	2.38785893	-1.25571761	1.25571761	0.0027455
438.929725	4249	605.163243	291.148162	2.38009083	-1.25101663	1.25101663	0.0298029
14.2023384	137	23.2074647	10.0489585	2.37994909	-1.25093071	1.25093071	0.0098964
10.2773285	99	16.3586864	7.11541708	2.37829449	-1.24992736	1.24992736	0.02055029
42.1938564	408	74.2358314	31.60493	2.37816967	-1.24985164	1.24985164	0.00478173
8.934562	86	16.0642187	6.79083255	2.37657397	-1.2488833	1.2488833	0.00636303
10.7937772	104	14.4531992	6.81876344	2.36967843	-1.2446913	1.2446913	0.04405334
605.845935	5865	1571.20878	663.489617	2.35551001	-1.23603946	1.23603946	0.00012251
59.4432419	575	105.363243	44.2524881	2.35033323	-1.23286531	1.23286531	0.01553051
3.56349582	34	6.12903567	2.64874476	2.34069061	-1.22693425	1.22693425	0.02663612
30.4188267	294	50.972345	22.2494277	2.33924316	-1.22604183	1.22604183	0.00650108
7.48850572	72	14.0690428	5.99844466	2.33446314	-1.22309081	1.22309081	0.00472458
4.49310343	43	7.91463611	3.32162781	2.33140798	-1.22120149	1.22120149	0.04446782
57.0675781	552	81.0994518	38.0013946	2.3246278	-1.21699974	1.21699974	0.02148741
2.94375742	28	5.43641378	2.33887556	2.31247735	-1.20943924	1.20943924	0.02637621
1.60099088	15	4.0651678	1.80621178	2.30108981	-1.20231729	1.20231729	0.02926778
12.2398335	118	22.4094066	9.62258401	2.30097153	-1.20224313	1.20224313	0.00657718
8.52140306	82	12.7542407	5.82129586	2.30035208	-1.20185469	1.20185469	0.0256556
7.28192625	70	11.7177061	5.20155745	2.29179081	-1.19647536	1.19647536	0.02234739
3.25362662	31	5.69368453	2.49381016	2.29044054	-1.19562511	1.19562511	0.02759703
67.9130001	657	87.095025	43.2853862	2.28160025	-1.19004605	1.19004605	0.04281133
4.18323423	40	7.31695209	3.23605295	2.26254246	-1.17794486	1.17794486	0.01916985
6.66218785	64	11.8130967	5.23848699	2.24901711	-1.16929464	1.16929464	0.00926507
10.5871977	102	15.6568631	7.27035168	2.24471159	-1.1665301	1.1665301	0.02571751
12.446413	120	16.5857591	8.06123979	2.24330726	-1.16562724	1.16562724	0.04214423
2.32401902	22	5.31302758	2.3758051	2.24198856	-1.16477892	1.16477892	0.01905486
74.6268329	722	100.761087	49.4166924	2.23782708	-1.16209856	1.16209856	0.03072688
10.3806183	100	15.8139468	7.30578145	2.23484828	-1.16017689	1.16017689	0.01953745
3.35691636	32	5.44516241	2.47609528	2.22830309	-1.15594548	1.15594548	0.03944614
15.0286563	145	46.8161609	23.6404695	2.22400104	-1.15315746	1.15315746	0.00759755
5.62929051	54	8.06776763	3.8203616	2.22377595	-1.15301144	1.15301144	0.04359814
2.01414981	19	4.62215542	2.082151	2.22160967	-1.15160536	1.15160536	0.02870881
7.69508519	74	12.2554468	5.61621616	2.22121512	-1.15134912	1.15134912	0.01690105
28.0431628	271	44.3081932	20.4373581	2.22004097	-1.1505863	1.1505863	0.00855781
350.307133	3391	476.732783	239.346013	2.21966334	-1.15034088	1.15034088	0.02655645
113.360483	1097	160.474574	78.285803	2.21744859	-1.14890066	1.14890066	0.01901072
12.9628616	125	23.8366437	10.6776956	2.21526612	-1.14748002	1.14748002	0.00204876
2.73717795	26	5.36772179	2.37430532	2.21339931	-1.14626375	1.14626375	0.03130276
9.2444312	89	12.322389	6.04409043	2.20841476	-1.14301115	1.14301115	0.04635914
2.01414981	19	4.74204217	2.15151075	2.19616801	-1.13498843	1.13498843	0.03710018
436.140902	4222	559.037349	291.418384	2.19131662	-1.13179795	1.13179795	0.0374623
34.6537058	335	49.3683244	23.8119893	2.18920738	-1.13040862	1.13040862	0.02051777
5.21613157	50	8.63875305	3.96058087	2.18817841	-1.12973037	1.12973037	0.02042149
17.3010305	167	23.7377537	11.5289448	2.18758558	-1.12933946	1.12933946	0.03390494
22.0523582	213	36.8792281	16.9564376	2.18742855	-1.12923589	1.12923589	0.0043574
31.3484343	303	76.3330053	33.5343522	2.16721317	-1.11584106	1.11584106	0.0142697
42.9168845	415	63.390094	30.5098893	2.16524537	-1.11453052	1.11453052	0.01257057
99.9328177	967	152.380983	73.4446835	2.16478927	-1.1142266	1.1142266	0.00815664
2.42730875	23	5.05400711	2.28873047	2.16125413	-1.11186872	1.11186872	0.03650545
16.2681331	157	22.3989082	10.8737766	2.15941049	-1.11063752	1.11063752	0.04610066
2.63388822	25	6.57838462	3.15497743	2.15027817	-1.10452331	1.10452331	0.02049029
4.59639317	44	7.51427946	3.51199217	2.13910467	-1.09700708	1.09700708	0.02711715
6.55889811	63	12.253697	5.67236036	2.13748164	-1.09591203	1.09591203	0.0054881
2.32401902	22	4.37888247	2.02900636	2.13717765	-1.09570684	1.09570684	0.03635194
22.0523582	213	30.3844082	15.0143646	2.13611563	-1.09498974	1.09498974	0.02677599

8.934562	86	13.7378309	6.51339356	2.13412945	-1.09364769	1.09364769	0.02389718
26.0806578	252	34.7501677	17.4446729	2.13041497	-1.09113447	1.09113447	0.03354172
6.24902891	60	11.2613583	5.23998676	2.12931443	-1.090389	1.090389	0.00757438
294.014228	2846	424.06758	210.575323	2.12774692	-1.08932656	1.08932656	0.02445169
4.0799445	39	9.66828877	4.57160304	2.12027007	-1.08424804	1.08424804	0.01817426
4.80297263	46	8.62300553	4.03144039	2.11434312	-1.08020952	1.08020952	0.0145621
18.1273483	175	26.7169725	12.9131402	2.10893439	-1.07651421	1.07651421	0.02418039
102.411771	991	130.374557	68.3030635	2.10652529	-1.07486524	1.07486524	0.03910334
88.6742367	858	173.267401	81.6179828	2.10158514	-1.0714779	1.0714779	0.00036505
6.55889811	63	9.82142029	4.77068363	2.09797744	-1.06899916	1.06899916	0.02829967
6.86876731	66	12.9340709	6.10473395	2.09229994	-1.06508968	1.06508968	0.00565234
33.8273879	327	49.3131774	24.3698668	2.08920381	-1.06295324	1.06295324	0.01327793
5.0095521	48	12.172757	6.00744332	2.08529713	-1.06025296	1.06025296	0.01114387
13.0661514	126	22.7970624	10.7987002	2.08417992	-1.05947983	1.05947983	0.00501403
323.141933	3128	426.482958	225.000456	2.08411834	-1.0594372	1.0594372	0.02722058
4.49310343	43	11.4166923	5.67985923	2.08411121	-1.05943226	1.05943226	0.01921994
50.6636146	490	63.851691	33.4815776	2.08237846	-1.05823229	1.05823229	0.04224622
6.14573918	59	8.80808482	4.35602492	2.0743538	-1.05266198	1.05266198	0.04442566
2.53059848	24	5.76237653	2.82589357	2.07100481	-1.05033091	1.05033091	0.02561272
32.8977803	318	60.4148886	28.2747272	2.06839944	-1.04851482	1.04851482	0.00770396
554.407648	5367	892.800895	443.979337	2.06766518	-1.04800259	1.04800259	0.00273416
30.4188267	294	40.8415843	20.792873	2.06675298	-1.04736596	1.04736596	0.03417195
338.945262	3281	426.7265	230.33581	2.06630258	-1.04705153	1.04705153	0.04222668
5.73258024	55	13.4398637	6.71575613	2.06515442	-1.04624967	1.04624967	0.00511798
2.53059848	24	5.25308421	2.54845458	2.06355113	-1.04512919	1.04512919	0.02604457
10.6904875	103	17.3558216	8.36239277	2.05665972	-1.04030311	1.04030311	0.01231851
9.34772093	90	13.4468626	6.71997303	2.04903363	-1.03494366	1.03494366	0.02681942
4.90626237	47	7.25875844	3.59756702	2.04735786	-1.0337633	1.0337633	0.04129541
14.5122076	140	19.5785229	9.99581386	2.04637351	-1.03306949	1.03306949	0.03313141
27.4234244	265	43.0432889	20.8904461	2.04566432	-1.03256942	1.03256942	0.0167512
110.365081	1068	151.897092	78.7995346	2.04411704	-1.0314778	1.0314778	0.01872805
2.84046769	27	5.00281236	2.42595019	2.04177104	-1.02982109	1.02982109	0.03678146
2.73717795	26	6.30361663	3.13726255	2.04074952	-1.02909912	1.02909912	0.03156302
15.0286563	145	32.9882192	15.9415375	2.03981664	-1.02843948	1.02843948	0.00659914
4.0799445	39	7.13187279	3.46184708	2.03896921	-1.02783999	1.02783999	0.02036561
38.4754259	372	76.7517035	36.5429701	2.03534726	-1.02527496	1.02527496	0.0046185
8.52140306	82	13.2372872	6.51489333	2.02575471	-1.01845949	1.01845949	0.02264941
4.6996829	45	6.81640839	3.42491754	2.02504949	-1.01795717	1.01795717	0.04801794
6.86876731	66	9.80217332	4.92561824	2.02363212	-1.01694705	1.01694705	0.04658357
3.97665476	38	7.01898494	3.41020221	2.015733	-1.01130456	1.01130456	0.02799435
3.35691636	32	5.63899033	2.75353427	2.01552808	-1.01115788	1.01115788	0.04191307
27.7332936	268	36.9544663	19.1726675	2.01475933	-1.01060751	1.01060751	0.0325356
9.5543004	92	15.8668913	7.79429923	2.01375175	-1.00988585	1.00988585	0.0098623
3.25362662	31	5.31652703	2.63252966	2.00717822	-1.00516872	1.00516872	0.04195779
6.86876731	66	13.045209	6.38217294	2.00615821	-1.00443538	1.00443538	0.01038343
12.2398335	118	27.7198096	14.0616079	2.00613212	-1.00441662	1.00441662	0.00360532
47.1517636	456	75.9553338	38.0373892	2.00425014	-1.00306257	1.00306257	0.00255812
2.32401902	22	4.37713274	2.16772585	2.00385487	-1.00277802	1.00277802	0.0429927
8.62469279	83	13.6214436	6.77461745	2.00290319	-1.00209269	1.00209269	0.01541909
7.59179545	73	3.31960143	6.60496751	-2.0210563	1.01510951	-1.01510951	0.02823038
12.033254	116	7.56372449	16.5246288	-2.02802798	1.02007755	-1.02007755	0.02434572
10.2773285	99	6.24542298	13.4271541	-2.03297048	1.02358927	-1.02358927	0.02211886
23.3951248	226	12.6593029	25.7429113	-2.0494622	1.03524538	-1.03524538	0.00474755
20.6063019	199	10.0629435	20.8805125	-2.07358621	1.05212803	-1.05212803	0.00117869
4.6996829	45	2.06474274	4.25723452	-2.08244243	1.05827661	-1.05827661	0.04243667

21.4326198	207	12.1058147	26.2182136	-2.11306479	1.079337	-1.079337	0.00676667
7.17863652	69	4.37013384	10.0050949	-2.12413614	1.08687624	-1.08687624	0.03696938
581.882717	5633	312.971644	668.501146	-2.1303573	1.09109542	-1.09109542	0.00033828
13.6858898	132	8.62255278	17.2815869	-2.1319678	1.09218565	-1.09218565	0.04183788
88.7775264	859	52.3549335	115.586544	-2.13536922	1.09448554	-1.09448554	0.00285339
6.04244944	58	3.3865437	7.42556871	-2.13678662	1.09544284	-1.09544284	0.02822947
58.6169241	567	31.8702305	59.583992	-2.14986712	1.10424749	-1.10424749	0.02842715
6.55889811	63	2.62522981	5.60300061	-2.15756457	1.10940373	-1.10940373	0.03003091
9.34772093	90	4.55521314	9.77180193	-2.15913514	1.11045355	-1.11045355	0.00913424
4.3898137	42	1.94135654	4.17165966	-2.17110325	1.11842834	-1.11842834	0.03576002
35.3767339	342	11.2753561	25.4913386	-2.20008829	1.13756142	-1.13756142	0.03794905
6.24902891	60	2.81030911	6.21102323	-2.22425647	1.15332315	-1.15332315	0.01579847
29.1793499	282	15.7220557	36.4033156	-2.23476353	1.16012218	-1.16012218	0.00311812
9.03785173	87	3.80789705	8.36839187	-2.23695541	1.1615365	-1.1615365	0.01029717
8.21153386	79	3.75145312	8.44075117	-2.24067402	1.16393278	-1.16393278	0.00705999
3.56349582	34	1.62764187	3.68914098	-2.25863026	1.17544812	-1.17544812	0.03777982
41.8839872	405	20.5056691	47.4027374	-2.27253034	1.18429956	-1.18429956	0.00038821
25.0477605	242	12.3066415	28.5806619	-2.28064689	1.18944309	-1.18944309	0.00121074
7.07534678	68	3.68276113	8.70497461	-2.28202032	1.19031164	-1.19031164	0.01691815
2.94375742	28	1.31567692	3.03247304	-2.31085287	1.20842541	-1.20842541	0.04935545
3.97665476	38	1.87966344	4.45059843	-2.33694807	1.22462568	-1.22462568	0.02902598
4.90626237	47	2.25507121	5.33156072	-2.34394553	1.22893904	-1.22893904	0.01907995
8.00495439	77	4.59590955	9.72465639	-2.35213274	1.23396948	-1.23396948	0.0488479
5.0095521	48	2.26032039	5.17512634	-2.36959623	1.24464125	-1.24464125	0.02473837
32.3813316	313	15.7343037	37.7962273	-2.37355286	1.24704818	-1.24704818	0.00124692
5.21613157	50	2.19512784	5.13969658	-2.39334923	1.25903093	-1.25903093	0.01962238
3.56349582	34	1.43906312	3.48106173	-2.42734774	1.2793808	-1.2793808	0.03225499
9.96745934	96	4.63965266	11.6769453	-2.47697288	1.30857807	-1.30857807	0.00591441
4.3898137	42	1.74927834	4.31037916	-2.47808781	1.30922731	-1.30922731	0.02131223
7.79837492	75	2.75736463	6.70825725	-2.48244878	1.31176395	-1.31176395	0.01413767
89.6038443	867	30.4492092	70.2222697	-2.55950685	1.35586587	-1.35586587	0.02417716
4.18323423	40	1.62414242	4.13772968	-2.56150921	1.35699408	-1.35699408	0.02086146
2.42730875	23	1.06190563	2.84360845	-2.60347028	1.38043594	-1.38043594	0.04558311
4.6996829	45	2.24107342	5.92186846	-2.66412924	1.41366407	-1.41366407	0.02920407
4.90626237	47	1.5606996	4.15244501	-2.71106004	1.43885707	-1.43885707	0.02569154
3.97665476	38	1.95010516	5.21355566	-2.7504883	1.45968777	-1.45968777	0.03854685
10.6904875	103	4.59370708	11.6916607	-2.78150507	1.47586574	-1.47586574	0.01007841
13.1694411	127	7.21806203	22.7108619	-2.79299134	1.4818111	-1.4818111	0.03469992
5.73258024	55	2.37670769	6.92383537	-2.79856697	1.48468827	-1.48468827	0.00963645
10.3806183	100	4.52326536	12.7158418	-2.83969578	1.50573638	-1.50573638	0.0075153
2.01414981	19	0.81513323	2.35958999	-2.84914566	1.51052938	-1.51052938	0.0484418
5.93915971	57	2.73811766	8.06752132	-2.93155422	1.55166574	-1.55166574	0.02355373
4.90626237	47	1.75452752	5.26220097	-2.98989923	1.58009686	-1.58009686	0.00918661
4.90626237	47	1.93610737	6.0251582	-2.99175628	1.58099265	-1.58099265	0.01186453
3.87336503	37	0.9984628	3.1504781	-3.22088854	1.68745874	-1.68745874	0.02956126
2.32401902	22	0.7516904	2.44516484	-3.24453906	1.69801354	-1.69801354	0.02875767
3.25362662	31	0.93851943	3.04868814	-3.27402614	1.71106584	-1.71106584	0.01899268
2.53059848	24	0.81513323	2.68717407	-3.31613024	1.72950067	-1.72950067	0.02480509
6.55889811	63	1.50950484	4.77068363	-3.38001206	1.7570284	-1.7570284	0.04143554
14.9253666	144	4.83523031	15.8898926	-3.39521934	1.76350478	-1.76350478	0.00109444
9.76087987	94	3.90853683	11.1574971	-3.42625349	1.77663189	-1.77663189	0.01604227
4.80297263	46	1.75102807	6.59775106	-3.48324571	1.80043224	-1.80043224	0.01268096
3.35691636	32	0.99496335	3.16969276	-3.52773372	1.81874167	-1.81874167	0.02482885
3.87336503	37	1.32617527	3.42791709	-3.57128908	1.83644492	-1.83644492	0.04911326
2.32401902	22	0.68474813	2.3758051	-3.67897047	1.8793021	-1.8793021	0.02907978

16.6812921	161	2.30976541	10.7335573	-4.27262471	2.0951226	-2.0951226	0.04761734
4.59639317	44	0.9437686	3.85879091	-4.55191362	2.18647318	-2.18647318	0.0141373
2.22072928	21	0.43622601	1.90800174	-4.57519066	2.19383186	-2.19383186	0.02785674
2.73717795	26	0.56311166	2.58238456	-4.61884143	2.20753102	-2.20753102	0.01320817
1.18783194	11	0.31109008	1.39155307	-4.69244639	2.23034026	-2.23034026	0.04418528
1.91086008	18	0.63180365	2.16922563	-4.78269478	2.25782373	-2.25782373	0.04483005
2.32401902	22	0.63005393	2.93068308	-5.16241507	2.36804614	-2.36804614	0.02143014
1.18783194	11	0.31283981	1.87707131	-5.29817067	2.40549432	-2.40549432	0.03932556
2.84046769	27	0.43972546	2.21787094	-5.29964789	2.40589651	-2.40589651	0.02485925
18.7470867	181	2.25332149	14.4021251	-6.36588715	2.67036158	-2.67036158	0.00290552
1.08454221	10	0.25289643	1.13182896	-6.7965663	2.76480606	-2.76480606	0.04061935
1.08454221	10	0.18770389	1.40926795	-7.08897852	2.82557776	-2.82557776	0.01878812
1.29112168	12	0.30934036	1.37383819	-7.2500706	2.85799504	-2.85799504	0.03825446
1.70428061	16	0.18770389	1.44169816	-7.735671	2.95152644	-2.95152644	0.01423035
1.08454221	10	0.25289643	1.3399082	-7.75305858	2.95476557	-2.95476557	0.03260105
2.32401902	22	0.37103346	1.75156736	-8.34924511	3.06164576	-3.06164576	0.04103812
1.18783194	11	0.18945361	1.25283358	-8.88504984	3.15137987	-3.15137987	0.01890996
1.60099088	15	0.30934036	1.80621178	-9.41359208	3.23474534	-3.23474534	0.02232182
1.39441141	13	0.24764726	1.70292205	-9.8718024	3.30331352	-3.30331352	0.01867377
2.01414981	19	0.30934036	1.87407176	-10.0603545	3.33060923	-3.33060923	0.01908817
1.29112168	12	0.18595416	1.44319794	-10.1188413	3.3389722	-3.3389722	0.01382904
4.90626237	47	2.28306681	5.8864387	-10.9919066	3.45836974	-3.45836974	0.04998472
1.39441141	13	0.18595416	1.70292205	-11.6804741	3.54602693	-3.54602693	0.01088958
2.63388822	25	0.76043903	3.84857491	-11.7853307	3.55892033	-3.55892033	0.03433011
9.03785173	87	1.91336095	7.81351389	-15.8201929	3.98369528	-3.98369528	0.02547054
15.545105	150	6.40685037	16.3384813	-18.8404439	4.23576105	-4.23576105	0.03670713
1.18783194	11	0.06256796	1.32219332	-20.7525484	4.3752166	-4.3752166	0.00190046
19.3668251	187	6.85095014	18.3880609	-20.7762963	4.37686659	-4.37686659	0.03355257
4.28652396	41	0.37103346	4.46681353	-21.3851333	4.41853629	-4.41853629	0.00482782
1.29112168	12	0.06256796	1.37383819	-21.7502118	4.44295754	-4.44295754	0.00165644
8.10824412	78	0.63355338	6.03087488	-22.1750928	4.47086824	-4.47086824	0.01648273
9.96745934	96	1.45831009	9.52679315	-23.277613	4.54087122	-4.54087122	0.01088645
1.49770114	14	0.06256796	1.47712792	-23.6514689	4.56385788	-4.56385788	0.00135385
7.90166466	76	0.50666773	7.38413985	-30.710216	4.94064676	-4.94064676	0.00372215
2.22072928	21	0.06256796	1.90800174	-30.7789065	4.94387007	-4.94387007	0.00093823
12.033254	116	0.06256796	10.6290502	-171.62386	7.42310633	-7.42310633	8.784E-05

\Aseq Gene expression in MLECs from miR-217KI apoE-/- (KI) or Control apoE-/- (wt) mice (p<0,05; LogFC >1<-1

adj.P.Val	chromosome	start_positio	end_position	strand	mgi_symbol	description	gene_biotype
0.22065087	X	66778442	66778852	-1	Gm14681	predicted gen	processed_ps
0.24129724	2	116527843	116528490	-1	Gm13991	predicted gen	processed_ps
0.24129724	9	64726624	64726730	-1			miRNA
0.28539113	9	33728247	33728850	1	Gm10698	predicted gen	processed_ps
0.27922083	5	13121448	13121766	-1	Gm10108	predicted pse	processed_ps
0.24129724	18	27598644	27599756	1	Gm7729	predicted gen	unprocessed_
0.24600235	14	24069734	24070637	1	Gm6158	predicted gen	processed_ps
0.24129724	17	77674376	77674702	-1	Gm17538	predicted gen	processed_ps
0.25524747	17	35335909	35336292	1	Gm8741	predicted gen	processed_ps
0.24129724	12	22953995	22960306	-1			transcribed_u
0.24129724	11	50921823	50931633	-1	Zfp354b	zinc finger pro	protein_codin
0.24129724	12	30174482	30373375	-1	Sntg2	syntrophin, ga	protein_codin
0.28398154	10	22212653	22217241	1	Gm26581	predicted gen	lincRNA
0.25092602	19	40622460	40622981	1	Gm8783	predicted pse	processed_ps
0.25092602	19	40560537	40561058	-1	Gm15801	predicted gen	processed_ps
0.28595683	11	90188108	90267581	1	Gm45883	predicted gen	processed_tra
0.24129724	5	144545902	144557478	1	Nptx2	neuronal pent	protein_codin
0.24482045	10	50255675	50259522	1			processed_ps
0.30471021	2	121481129	121481514	1	Gm14017	predicted gen	processed_ps
0.25524747	12	105513480	105515246	1	AU015791	expressed se	lincRNA
0.24801243	10	126998440	126998560	1	Mir546	microRNA 54	miRNA
0.27809362	5	120940499	121010092	-1	Rph3a	rabphilin 3A [S	protein_codin
0.24847194	7	24370263	24386690	1	Kcnn4	potassium int	protein_codin
0.2574015	15	77729121	77736381	1	Apol9b	apolipoprotein	protein_codin
0.26974276	7	45621811	45628823	1	Izumo1	izumo sperm-	protein_codin
0.25092602	8	119666365	119688222	1	Wfdc1	WAP four-dis	protein_codin
0.29854432	4	60658466	60662411	-1	Mup11	major urinary	protein_codin
0.24129724	5	134702593	134747323	-1	Eln	elastin [Sourc	protein_codin
0.27427568	17	33630759	33645705	1	Gm20507	predicted gen	processed_tra
0.30032248	16	36963460	36990467	-1	Fbxo40	F-box protein	protein_codin
0.26572283	5	31596938	31701972	1	Gm43809	predicted gen	processed_tra
0.26974276	7	28692849	28699338	1	Fbxo27	F-box protein	protein_codin
0.24129724	6	8509600	8597548	1	Glcci1	glucocorticoid	protein_codin
0.29179987	14	113314608	113316754	1	Tpm3-rs7	tropomyosin 3	protein_codin
0.30032248	10	75561604	75586200	1	Ggt1	gamma-glutar	protein_codin
0.3124941	3	88576410	88577139	-1	Gm10704	predicted pse	processed_ps
0.31105682	8	89027235	89044162	-1	Sall1	sal-like 1 (Dro	protein_codin
0.3062389	2	84734058	84738655	1	Ypel4	yippee-like 4 (	protein_codin
0.30839503	8	105269801	105275845	1	Hsf4	heat shock tra	protein_codin
0.25645084	15	89322972	89324728	1	Adm2	adrenomedull	protein_codin
0.26792615	7	113765998	114043370	1	Spon1	spondin 1, (f-s	protein_codin
0.27922083	13	33562486	33569317	-1	Gm6093	predicted gen	lincRNA
0.25645084	8	121054882	121083110	-1	Fendrr	Foxf1 adjacer	processed_tra
0.24129724	11	116330704	116335399	-1	Foxj1	forkhead box	protein_codin
0.24129724	3	116560935	116561426	-1	Gm9761	predicted gen	processed_ps
0.27809362	6	86334031	86334240	1	Gm10443	predicted pse	processed_ps
0.25441851	9	120539818	120568327	1	Entpd3	ectonucleosid	protein_codin
0.26016431	4	127311421	127314039	-1	Gja4	gap junction p	protein_codin
0.27341918	11	120229802	120231585	-1	2900052L18R	RIKEN cDNA	processed_tra
0.30218759	3	19934242	19935388	1	Gm17771	predicted gen	processed_ps
0.28078162	17	14195231	14203831	-1	Dact2	dishevelled-bi	protein_codin
0.24129724	1	78816758	78820028	1	Kcne4	potassium vol	protein_codin

0.24129724	2	136881271	136891389	-1			protein_codin
0.28607892	4	133518963	133530790	1	Kdf1	keratinocyte d	protein_codin
0.30132656	7	19778881	19796809	-1	Cblc	Casitas B-line	protein_codin
0.27582371	2	85136225	85139923	1	Aplnr	apelin recepto	protein_codin
0.3009615	10	43002500	43174530	-1	Sobp	sine oculis-bir	protein_codin
0.24255557	12	110858565	110858894	-1	Mpc1-ps	mitochondrial	processed_ps
0.24129724	11	85886422	85916097	1	Tbx4	T-box 4 [Sour	protein_codin
0.24129724	4	123233556	123249875	1	Heyl	hairy/enhance	protein_codin
0.25645084	1	31615149	31616661	1	Gm19680	predicted gen	processed_ps
0.3105668	4	63362449	63365878	1	Orm2	orosomucoid 2	protein_codin
0.26792615	5	139907943	139974722	1	Elfn1	leucine rich re	protein_codin
0.24801243	5	149411749	149431723	1	Medag	mesenteric es	protein_codin
0.27911944	3	96706067	96708562	-1	Nudt17	nudix (nucleos	protein_codin
0.29844885	2	25255439	25256292	1	Tmem203	transmembran	protein_codin
0.28398154	12	71309884	71320107	1	Dact1	dishevelled-bi	protein_codin
0.2574015	2	163336242	163397993	-1	Jph2	junctophilin 2	protein_codin
0.26974276	9	20667690	20746349	-1	Olfm2	olfactomedin 2	protein_codin
0.24129724	17	23679365	23682446	1	Cldn6	claudin 6 [Sou	protein_codin
0.25524747	2	110360917	110363183	-1	Fibin	fin bud initiatic	protein_codin
0.24129724	4	42772860	42773993	-1	Ccl21a	chemokine (C	protein_codin
0.31040924	1	105764444	105764674	1	Gm10193	predicted gen	processed_ps
0.24129724	19	17432832	17837632	-1	Pcsk5	proprotein cor	protein_codin
0.27809362	1	173962568	173982744	-1	Ifi202b	interferon acti	protein_codin
0.25645084	2	164940780	164955850	1	Mmp9	matrix metallo	protein_codin
0.24482045	7	4772373	4782857	-1	Il11	interleukin 11	protein_codin
0.24129724	14	31217860	31230352	1	Sema3g	sema domain	protein_codin
0.29179987	5	121518576	121522071	-1	Adam1a	a disintegrin a	protein_codin
0.28539113	16	33379855	33380727	-1	1700007L15R	RIKEN cDNA	lincRNA
0.24255557	18	60925618	60988152	1	Camk2a	calcium/calmo	protein_codin
0.29292147	10	81273207	81291581	-1	Tjp3	tight junction p	protein_codin
0.24129724	11	3703731	3863903	-1	Osbp2	oxysterol bind	protein_codin
0.24129724	9	20770050	20815067	-1	Col5a3	collagen, type	protein_codin
0.28398154	10	61197112	61273438	-1	Adamts14	a disintegrin-li	protein_codin
0.24129724	3	92483952	92485895	-1	Sprr1a	small proline-r	protein_codin
0.26572283	7	73939119	74013690	-1	St8sia2	ST8 alpha-N-a	protein_codin
0.30032248	6	129397297	129409335	1	Clec1b	C-type lectin d	protein_codin
0.24482045	1	72857932	72874884	-1	Igfbp5	insulin-like gro	protein_codin
0.26974276	14	70766036	70778495	1	Dok2	docking protei	protein_codin
0.27122545	7	112116017	112159057	-1	Dkk3	dickkopf WNT	protein_codin
0.30075081	1	150449412	150466165	-1	Prg4	proteoglycan 4	protein_codin
0.28078469	14	56117626	56120625	-1	Gzme	granzyme E [S	protein_codin
0.28539113	4	115543385	115545064	-1	Cyp4b1-ps1	cytochrome P	unprocessed_
0.24600235	1	172481788	172498878	1	Igsf9	immunoglobul	protein_codin
0.29106159	19	3409919	3414472	-1	Gal	galanin [Sourc	protein_codin
0.24129724	15	75596628	75599481	1	Gpihbp1	GPI-anchored	protein_codin
0.26634169	13	31625816	31631403	1	Foxf2	forkhead box	protein_codin
0.24129724	15	74714839	74717069	1	Psca	prostate stem	protein_codin
0.24129724	3	96904693	97077416	1	Gja5	gap junction p	protein_codin
0.24129724	9	98422961	98446575	1	Rbp1	retinol binding	protein_codin
0.24129724	6	125546774	125686679	1	Vwf	Von Willebran	protein_codin
0.30559401	17	34181988	34187764	-1	Psmb9	proteasome (p	protein_codin
0.24497448	8	54529580	54587842	1	Asb5	ankyrin repea	protein_codin
0.25441851	17	47436615	47470638	1	AI661453	expressed se	protein_codin
0.22065087	2	133552159	133562885	1	Bmp2	bone morpho	protein_codin
0.2574015	9	108953586	108984875	1	Col7a1	collagen, type	protein_codin

0.25645084	5	87925579	87932665	1	Csn3	casein kappa	protein_codin
0.31297411	7	112953962	112957457	1	Rassf10	Ras associati	protein_codin
0.25481161	1	75168646	75171629	1	Zfand2b	zinc finger, AN	protein_codin
0.24482045	1	45311538	45349706	1	Col3a1	collagen, type	protein_codin
0.2574015	17	25748614	25754327	-1	Msln	mesothelin [S	protein_codin
0.26765326	18	11820671	11840869	-1	Gm6277	predicted gen	antisense_RN
0.26572283	15	76703553	76710559	-1	Recql4	RecQ protein-	protein_codin
0.28186731	17	26202951	26211324	1	Rgs11	regulator of G	protein_codin
0.2505412	11	94936224	94953042	1	Col1a1	collagen, type	protein_codin
0.28449866	1	86014403	86015886	-1	Gm18180	predicted gen	processed_ps
0.26024884	7	30942368	30944032	-1	Hamp	hepcidin antir	protein_codin
0.24129724	4	155768149	155774698	-1	Vwa1	von Willebran	protein_codin
0.25092602	1	162874317	162898726	-1	Fmo2	flavin containi	protein_codin
0.29862395	13	68620043	68999541	-1	Adcy2	adenylate cyc	protein_codin
0.24482045	5	52533517	52566462	-1	Lgi2	leucine-rich re	protein_codin
0.26533891	11	5896637	5898782	-1	Myl7	myosin, light p	protein_codin
0.26948501	2	170731807	170879769	1	Dok5	docking protei	protein_codin
0.24129724	4	12232833	12233951	1	Gm11847	predicted gen	processed_ps
0.30729504	5	31251691	31253202	1	Krtcap3	keratinocyte a	protein_codin
0.2505412	12	112620045	112641360	1	Adssl1	adenylosuccir	protein_codin
0.30037427	11	54054928	54069014	-1	Pdlim4	PDZ and LIM	protein_codin
0.26124082	6	4504814	4541544	1	Col1a2	collagen, type	protein_codin
0.24129724	2	91982328	92024502	-1	Creb3l1	cAMP respon	protein_codin
0.24129724	5	52363791	52371418	1	Sod3	superoxide dis	protein_codin
0.2574015	8	12873806	13020905	1	Mcf2l	mcf.2 transfor	protein_codin
0.30030329	1	14753346	14755992	-1	Msc	musculin [Sou	protein_codin
0.24129724	5	119670669	119684724	1	Tbx3	T-box 3 [Sour	protein_codin
0.26572283	14	65968483	65981547	1	Clu	clusterin [Sou	protein_codin
0.25645084	6	120005998	120006285	1	Gm16199	predicted gen	processed_ps
0.22065087	11	111066164	111076821	1	Kcnj2	potassium inw	protein_codin
0.24129724	17	14279506	14404790	1	Smoc2	SPARC relate	protein_codin
0.24129724	10	26980036	27619758	-1	Lama2	laminin, alpha	protein_codin
0.24129724	7	45918023	45921404	-1	Emp3	epithelial mer	protein_codin
0.31373353	4	58435255	58553898	-1	Lpar1	lysophosphati	protein_codin
0.27922083	5	35652023	35679782	-1	Htra3	HtrA serine pe	protein_codin
0.25092602	7	98835112	98855195	1	Wnt11	wingless-type	protein_codin
0.26308826	8	70493158	70504081	1	Crlf1	cytokine recep	protein_codin
0.26634169	14	55618037	55625395	1	Rec8	REC8 meiotic	protein_codin
0.24847194	19	4711208	4752353	1	Sptbn2	spectrin beta,	protein_codin
0.26974276	7	140763739	140774987	1	Cyp2e1	cytochrome P	protein_codin
0.29386766	4	135369576	135398227	-1	Ncmap	noncompact r	protein_codin
0.25092602	6	83512905	83536265	-1	Actg2	actin, gamma	protein_codin
0.24129724	13	51846678	51848468	1	Gadd45g	growth arrest	protein_codin
0.24129724	5	104079111	104113733	-1	Sparcl1	SPARC-like 1	protein_codin
0.24600235	3	68733137	68738077	1	Gm10040	predicted gen	pseudogene
0.28539113	7	141215860	141218658	1	Rassf7	Ras associati	protein_codin
0.3085551	8	122269569	122272650	1	Zfp469	zinc finger pro	lincRNA
0.24129724	6	84571414	84593908	-1	Cyp26b1	cytochrome P	protein_codin
0.24129724	16	84774123	84825928	1	Jam2	junction adhes	protein_codin
0.24129724	7	130936111	130985660	1	Htra1	HtrA serine pe	protein_codin
0.27922083	10	79820989	79830490	1	Misp	mitotic spindle	protein_codin
0.29179987	2	102449366	102452499	-1	Fjx1	four jointed bo	protein_codin
0.28640764	6	136872435	136875823	-1	Mgp	matrix Gla pro	protein_codin
0.25091753	7	30434982	30445535	-1	Aplp1	amyloid beta (	protein_codin
0.24315024	6	122505845	122529290	1	Mfap5	microfibrillar a	protein_codin

0.28056807		10	127165225	127172330	1	B4galnt1	beta-1,4-N-ac protein_codin
0.26792615		10	80329953	80336441	1	Reep6	receptor acce protein_codin
0.24129724		16	92485736	92541243	1	Clic6	chloride intrac protein_codin
0.25645084		4	136172394	136196057	1	E2f2	E2F transcript protein_codin
0.25645084		8	105518755	105523988	1	Hsd11b2	hydroxysteroic protein_codin
0.30218759		1	135253575	135258568	-1	Elf3	E74-like facto protein_codin
0.2574015		4	127325235	127330844	-1	Gjb3	gap junction p protein_codin
0.2574015		5	134945119	134946934	-1	Cldn4	claudin 4 [Sou protein_codin
0.27809362		4	136647539	136835988	-1	Ephb2	Eph receptor I protein_codin
0.24129724		17	34197721	34201454	1	Psmb8	proteasome (p protein_codin
0.24482045		3	18071950	18243338	-1	Cyp7b1	cytochrome P protein_codin
0.24129724		6	92772699	92943492	-1	Adamts9	a disintegrin-li protein_codin
0.26016581		7	83932857	84086502	-1	Cemip	cell migration protein_codin
0.29321938		8	70483867	70487358	-1	Tmem59l	transmembrar protein_codin
0.25836658		8	105984944	105991759	-1	Dpep2	dipeptidase 2 protein_codin
0.24129724		1	166254139	166316823	1	Ildr2	immunoglobul protein_codin
0.2574015		2	175965331	175980303	1	Gm2026	predicted gen protein_codin
0.25092602		15	101411043	101430313	1	Krt7	keratin 7 [Sou protein_codin
0.3062389		6	134605234	134607681	-1	Gm38910	predicted gen lincRNA
0.29106159		7	30957770	30973464	-1	Lsr	lipolysis stimu protein_codin
0.24129724		16	18621811	18629938	-1	Sept5	septin 5 [Sour protein_codin
0.24129724		2	119351229	119354381	1	Chac1	ChaC, cation protein_codin
0.26803219		15	54250619	54278484	-1	Tnfrsf11b	tumor necrosi protein_codin
0.28398154		18	61045150	61085061	1	Pdgfrb	platelet derive protein_codin
0.26689807		9	56865033	56899870	1	Cspg4	chondroitin su protein_codin
0.24129724		2	27886425	28039514	1	Col5a1	collagen, type protein_codin
0.25092602		6	82911885	82939769	-1	Sema4f	sema domain protein_codin
0.25092602		10	83487450	83534140	-1	Aldh1l2	aldehyde dehy protein_codin
0.24129724		10	102481756	102490486	-1	Nts	neurotensin [S protein_codin
0.24129724		7	19212538	19224174	1	Gpr4	G protein-cou protein_codin
0.24129724		1	40429570	40465415	1	Il1rl1	interleukin 1 r protein_codin
0.29258678		9	65398506	65414853	1	Rasl12	RAS-like, fam protein_codin
0.24129724		1	75360329	75368579	1	Des	desmin [Sourc protein_codin
0.25092602	X		101079210	101086020	-1	Slc7a3	solute carrier protein_codin
0.24801243		11	100140810	100148665	-1	Krt19	keratin 19 [So protein_codin
0.30684019		1	133164210	133303435	1	Plekha6	pleckstrin hon protein_codin
0.2574015		19	46003478	46006173	1	Hps6	HPS6, biogen protein_codin
0.27582371		16	93683215	93690990	1	Cbr3	carbonyl redu protein_codin
0.278013		11	112782224	112787760	1	Sox9	SRY (sex dete protein_codin
0.25312478		12	85473890	85477273	1	Fos	FBJ osteosarc protein_codin
0.28398154		1	91179822	91225196	1	Ramp1	receptor (calc protein_codin
0.24129724		14	26203369	26207041	-1	Tmem254b	transmembrar protein_codin
0.24129724		18	6332590	6333064	1	Rpl27-ps3	ribosomal pro protein_codin
0.30034283		4	140906344	140952586	1	Padi2	peptidyl argini protein_codin
0.25092602		2	151996511	152009258	1	Slc52a3	solute carrier protein_codin
0.24129724		7	45302632	45333780	-1	Trpm4	transient rece protein_codin
0.24129724		7	107595207	107748583	1	Ppfibp2	PTPRF intera protein_codin
0.25092602		12	76792333	76795554	-1	Gpx2	glutathione pe protein_codin
0.25092602		7	30555441	30559838	-1	Lin37	lin-37 homolo protein_codin
0.24129724		2	119325784	119335962	1	Dll4	delta-like 4 (D protein_codin
0.30032248		8	105935735	105938444	-1	Psmb10	proteasome (p protein_codin
0.26792615		3	18054174	18057517	1	Bhlhe22	basic helix-loc protein_codin
0.31057168		7	66390890	66427517	-1	Aldh1a3	aldehyde dehy protein_codin
0.24407936		12	84783212	84876532	-1	Ltbp2	latent transfor protein_codin
0.27122545		6	85213049	85333422	-1	Sfxn5	sideroflexin 5 protein_codin

0.24129724	2	84765387	84775444	-1	Serping1	serine (or cys	protein_codin
0.27922083	19	34241090	34255336	-1	Acta2	actin, alpha 2,	protein_codin
0.24482045	14	56082166	56085273	-1	Mcpt8	mast cell prot	protein_codin
0.26366448	4	65124174	65357509	1	Pappa	pregnancy-as	protein_codin
0.24129724	2	180176373	180225859	-1	Lama5	laminin, alpha	protein_codin
0.24129724	9	67217087	67559703	-1	Tln2	talin 2 [Source	protein_codin
0.30322797	5	53107083	53213927	-1	Sel1l3	sel-1 suppres	protein_codin
0.22065087	11	7206086	7213923	-1	Igfbp3	insulin-like gr	protein_codin
0.25441851	1	90765923	90843971	-1	Col6a3	collagen, type	protein_codin
0.27344965	5	139802485	139819917	-1	Tmem184a	transmembra	protein_codin
0.24129724	16	33829665	33949153	1	Itgb5	integrin beta 5	protein_codin
0.24129724	4	139082284	139092993	-1	Nbl1	neuroblastom	protein_codin
0.30419667	8	71676296	71690575	1	Jak3	Janus kinase	protein_codin
0.26572283	4	133600556	133602168	-1	Sfn	stratifin [Sour	protein_codin
0.27341631	5	91139599	91148432	1	Areg	amphiregulin	protein_codin
0.27809362	16	4710059	4719356	-1	Nmral1	NmrA-like fan	protein_codin
0.24129724	11	77462411	77470484	1	Coro6	coronin 6 [So	protein_codin
0.27122545	9	75775364	75900310	1	Bmp5	bone morpho	protein_codin
0.26634169	7	100642892	100662414	-1	Plekhb1	pleckstrin hon	protein_codin
0.27582371	11	52252371	52283014	-1	Tcf7	transcription f	protein_codin
0.3009615	7	29256323	29281912	-1	Spint2	serine proteas	protein_codin
0.25968483	7	19808462	19822770	-1	Bcl3	B cell leukemi	protein_codin
0.24255557	13	51408639	51422797	1	S1pr3	sphingosine-1	protein_codin
0.27122545	12	90724552	90738438	-1	Dio2	deiodinase, io	protein_codin
0.30034283	12	57540628	57546916	-1	Foxa1	forkhead box	protein_codin
0.25968483	4	62480053	62497298	1	Bspry	B-box and SP	protein_codin
0.28058077	1	93151349	93160948	-1	2310007B03F	RIKEN cDNA	protein_codin
0.26024884	4	150914562	150946102	1	Tnfrsf9	tumor necrosi	protein_codin
0.29673526	3	107039504	107054347	1	AI504432	expressed se	lincRNA
0.24129724	5	24364810	24384474	1	Nos3	nitric oxide sy	protein_codin
0.30219751	7	121865038	121918514	1	Scnn1b	sodium chann	protein_codin
0.27809362	11	118428203	118449963	1	C1qtnf1	C1q and tumo	protein_codin
0.25645084	5	139017306	139150001	-1	Prkar1b	protein kinase	protein_codin
0.24129724	11	4257557	4272514	1	Lif	leukemia inhit	protein_codin
0.27344965	15	101996711	102004342	-1	Krt8	keratin 8 [Sou	protein_codin
0.25968483	4	43514711	43523765	-1	Tpm2	tropomyosin 2	protein_codin
0.24129724	8	95352268	95375080	1	Mmp15	matrix metallo	protein_codin
0.28186731	2	25620067	25622005	-1	Tmem141	transmembra	protein_codin
0.30748942	3	59113855	59153618	-1	P2ry14	purinergic rec	protein_codin
0.29106159	11	51898966	51909624	1	Gm39822	predicted gen	lincRNA
0.29179987	9	45929619	45936058	-1	Tagln	transgelin [So	protein_codin
0.26359058	17	35681567	35704621	-1	Ddr1	discoidin dom	protein_codin
0.26348197	5	63812363	63899625	1	0610040J01R	RIKEN cDNA	protein_codin
0.28580488	18	74440936	74771493	1	Myo5b	myosin VB [S	protein_codin
0.24129724	17	56412426	56476483	-1	Ptprs	protein tyrosin	protein_codin
0.25092602	4	47208161	47313167	1	Col15a1	collagen, type	protein_codin
0.25092602	5	17574281	17730268	1	Sema3c	sema domain	protein_codin
0.24129724	7	126623249	126630861	-1	Nupr1	nuclear protei	protein_codin
0.290554	17	32924688	32947402	-1	Cyp4f13	cytochrome P	protein_codin
0.30729504	1	91366430	91374217	1	Erfe	erythroferron	protein_codin
0.26348197	15	101050194	101078567	-1	Fignl2	fidgetin-like 2	protein_codin
0.27566068	3	129269175	129332720	-1	Enpep	glutamyl amin	protein_codin
0.24129724	1	36307733	36324029	1	Arid5a	AT rich intera	protein_codin
0.29033337	2	84838850	84863594	1	Slc43a1	solute carrier	protein_codin
0.27427568	1	132316126	132333488	1	Nuak2	NUAK family,	protein_codin

0.26832184		3	102469919	102521013	1	Ngf	nerve growth f protein_codin
0.28539113		2	126034658	126091185	1	Fgf7	fibroblast grov protein_codin
0.24129724		7	143106362	143427042	1	Kcnq1	potassium vol protein_codin
0.26974276	X		73483602	73495933	1	Bgn	biglycan [Sou protein_codin
0.2574015		19	24674008	24679661	1	Tmem252	transmembra protein_codin
0.25092602		16	32735886	32782391	1	Muc4	mucin 4 [Sour protein_codin
0.26948501		1	131638306	131675505	1	Ctse	cathepsin E [S protein_codin
0.2959992		8	94974751	95014217	1	Adgrg1	adhesion G pr protein_codin
0.24129724		5	147561604	147726011	-1	Flt1	FMS-like tyros protein_codin
0.27775622		10	47640123	47640534	1		TEC
0.24129724		14	55823144	55833943	1	Nfatc4	nuclear factor protein_codin
0.25092602		9	31089402	31131853	-1	St14	suppression o protein_codin
0.24600235		7	100937630	100974649	-1	P2ry6	pyrimidinergic protein_codin
0.24129724		11	116598165	116627019	-1	Rhbdf2	rhomboid 5 ho protein_codin
0.27577011		2	113746164	113758646	-1	Grem1	gremlin 1, DA protein_codin
0.25968483		11	71749920	71789647	1	Wscd1	WSC domain protein_codin
0.30034283		3	89229057	89233381	1	Muc1	mucin 1, trans protein_codin
0.30412799		2	29869164	29882840	1	Cercam	cerebral endo protein_codin
0.27122545		12	73937653	73968375	1		protein_codin
0.24129724		12	76797960	76822908	-1	Rab15	RAB15, meml protein_codin
0.24129724		9	44134469	44142727	1	Mcam	melanoma cel protein_codin
0.28607892		7	3665790	3677553	-1	Tmc4	transmembra protein_codin
0.30034283		15	102028216	102032026	1	Krt18	keratin 18 [So protein_codin
0.24129724		11	120610087	120617936	-1	Pcyt2	phosphate cyt protein_codin
0.27201456		4	32238804	32586108	1	Bach2	BTB and CNC protein_codin
0.2505412		9	119052778	119071525	1	Vill	villin-like [Sou protein_codin
0.2745175		15	37233036	37363569	1	Grhl2	grainyhead-lik protein_codin
0.29958097		19	38097079	38114263	1	Ffar4	free fatty acid protein_codin
0.28481495		7	141338880	141363020	1	Eps8l2	EPS8-like 2 [S protein_codin
0.25645084		3	132085292	132180304	1	Dkk2	dickkopf WNT protein_codin
0.25910571		17	46016993	46032369	-1	Vegfa	vascular endo protein_codin
0.29074567		5	101765130	101823858	1	Cds1	CDP-diacylgly protein_codin
0.28310638		6	73017606	73221651	-1	Dnah6	dynein, axone protein_codin
0.24129724		12	86678700	86692091	1	Vash1	vasohibin 1 [S protein_codin
0.26348197		4	152274232	152285337	1	Gpr153	G protein-cou protein_codin
0.24129724		15	74994877	74998031	-1	Ly6a	lymphocyte an protein_codin
0.26740974		11	33963013	33973641	1	Kcnmb1	potassium lar protein_codin
0.31062572		3	108390851	108415552	-1	Celsr2	cadherin, EGF protein_codin
0.30764706		15	76001093	76014336	-1	Fam83h	family with se protein_codin
0.27661458		2	69135800	69189330	1	Nostrin	nitric oxide sy protein_codin
0.30032248		4	148804429	148954889	1	Casz1	castor zinc fin protein_codin
0.28398154		3	90526856	90528837	1	S100a14	S100 calcium protein_codin
0.24482045		10	87858265	87937042	1	Igf1	insulin-like gro protein_codin
0.30032248		1	36530188	36536883	-1	Ankrd23	ankyrin repea protein_codin
0.24482045		5	135009152	135012175	1	Abhd11	abhydrolase d protein_codin
0.24129724		7	105752990	105787654	-1	Dchs1	dachsous 1 (D protein_codin
0.24129724		11	54100095	54131665	1	P4ha2	procollagen-pr protein_codin
0.30115445		12	17284721	17329359	-1	Atp6v1c2	ATPase, H+ tr protein_codin
0.25441851		7	101317086	101346626	1	Stard10	START doma protein_codin
0.27727834		6	8259288	8459470	1	Umad1	UMAP1-MVP protein_codin
0.26952164	X		103356476	103396092	1	Chic1	cysteine-rich h protein_codin
0.26634169		6	65117293	65144908	-1	Hpgds	hematopoietic protein_codin
0.24129724		15	54745702	54754039	1	Nov	nephroblastor protein_codin
0.24129724		9	64922861	64951607	-1	Slc24a1	solute carrier protein_codin
0.30046289		4	63979854	64149924	1	8030451A03F	RIKEN cDNA processed_tra

0.24129724		4	146449023	146470292	1	Zfp992	zinc finger prc	protein_codin
0.29106159		16	28160120	28445227	-1	Fgf12	fibroblast grov	protein_codin
0.24129724		15	3268547	3280508	1	Selenop	selenoprotein	protein_codin
0.30032248		1	164048234	164057677	1	Sele	selectin, endo	protein_codin
0.24129724		13	60895350	60936571	-1			protein_codin
0.27727834		2	104721784	104742878	-1	Depdc7	DEP domain (	protein_codin
0.278013	Y		1096861	1245759	-1	Uty	ubiquitously tr	protein_codin
0.27922083		18	37805718	37807922	-1	BC037039	cDNA sequen	antisense_RN
0.24255557	X		106143204	106160493	1	Tlr13	toll-like recept	protein_codin
0.28888815		2	91237146	91238352	1	A330069E16F	RIKEN cDNA	lincRNA
0.29262605		7	41478874	41499890	-1	AW146154	expressed se	protein_codin
0.25524747		6	31220351	31337404	1	2210408F21F	RIKEN cDNA	processed_tra
0.24129724		10	67886103	67912662	-1	Zfp365	zinc finger prc	protein_codin
0.24482045		17	94873986	94877497	1	Gm20939	predicted gen	protein_codin
0.24129724		10	86841198	87008025	-1	Stab2	stabilin 2 [Sou	protein_codin
0.29198324		7	103548074	103555506	1	Olfr613	olfactory rece	protein_codin
0.24129724		2	79255426	79333123	1	Itga4	integrin alpha	protein_codin
0.24129724		2	12106632	12301922	-1	Itga8	integrin alpha	protein_codin
0.25645084		19	58235604	58455909	-1	Gfra1	glial cell line d	protein_codin
0.3124941		13	22002173	22009742	-1	Prss16	protease, seri	protein_codin
0.27809362	X		152343598	152368704	-1	Gpr173	G-protein cou	protein_codin
0.25968483		1	153653025	153700323	1	Rgs8	regulator of G	protein_codin
0.31228543		3	66219910	66225805	1	Ptx3	pentraxin rela	protein_codin
0.26974276		7	59974149	60005064	-1	Gm38393	predicted gen	protein_codin
0.24129724		3	144729677	144760977	-1	Clca3a1	chloride chan	protein_codin
0.26024884		1	175059087	175492500	-1	Rgs7	regulator of G	protein_codin
0.28398154		12	19044706	19055179	1	Gm40849	predicted gen	lincRNA
0.24129724		5	96910341	96922175	-1	Gm33370	predicted gen	lincRNA
0.26572283		12	11698868	11700546	-1			TEC
0.25092602		15	54838901	54952892	-1	Enpp2	ectonucleotide	protein_codin
0.26948501		2	168180986	168207112	-1	Adnp	activity-depen	protein_codin
0.26397285	X		56797858	56822326	-1	Map7d3	MAP7 domair	protein_codin
0.3062389		8	77574219	77575568	1	Gm45286	predicted gen	TEC
0.27809362		2	113919247	113920562	-1	Gm21596	predicted gen	processed_ps
0.27122545		7	104470014	104507849	-1	Trim30d	tripartite motif	protein_codin
0.29449362		15	47580637	48792063	-1	Csmd3	CUB and Sus	protein_codin
0.24482045		2	112266314	112406319	1	Gm21985	predicted gen	protein_codin
0.28640651		3	90603771	90606045	1	S100a4	S100 calcium	protein_codin
0.24482045		9	19168407	19177312	-1	Olfr839-ps1	olfactory rece	protein_codin
0.24129724		7	19463331	19496762	1	Exoc3l2	exocyst comp	protein_codin
0.31154636		11	117420637	117421717	-1	Gm8624	predicted gen	transcribed_p
0.26792615	X		75172715	75382615	-1	F8	coagulation fa	protein_codin
0.24255557		2	89604959	89614130	-1	Olfr1247	olfactory rece	protein_codin
0.24801243		1	127959516	127967452	1	Gm28800	predicted gen	antisense_RN
0.2786888		9	88826604	88826813	-1	Gm37614	predicted gen	TEC
0.27809362		19	35835221	35924578	-1	A830019P07F	RIKEN cDNA	lincRNA
0.25968483		8	71520120	71525711	-1	C430049E01F	RIKEN cDNA	protein_codin
0.26974276		8	71371298	71379361	1	Ocel1	occludin/ELL (	protein_codin
0.30030329		11	60573527	60633113	1	Gm26837	predicted gen	lincRNA
0.24129724		2	110655201	110950923	-1	Ano3	anoctamin 3 [	protein_codin
0.25524747		11	49165585	49187159	-1	Btnl9	butyrophilin-lik	protein_codin
0.25092602		1	173630917	173647928	1	Ifi209	interferon acti	protein_codin
0.26974276		5	73311364	73312560	1	Gm42732	predicted gen	TEC
0.31241416		11	69682846	69685784	-1	Tnfsf13	tumor necrosi	protein_codin
0.27809362		1	175962306	176275312	-1	Pld5	phospholipase	protein_codin

0.31040924	13	28943048	28951671	1	Gm26735	predicted gen	lincRNA
0.25092602	1	97024516	97025565	-1	Gm28901	predicted gen	lincRNA
0.27646771	6	30541582	30564476	1	Cpa2	carboxypeptid	protein_codin
0.25092602	8	83389867	83428552	1	Clgn	calmegin [Sou	protein_codin
0.30362218	14	29958071	29961381	-1			lincRNA
0.30537737	5	112384354	112394866	-1	Asphd2	aspartate beta	protein_codin
0.26572283	3	151796502	151837630	-1	Ptgfr	prostaglandin	protein_codin
0.29647234	6	117905808	117907760	-1	4933440N22F	RIKEN cDNA	TEC
0.26974276	1	85199613	85213786	1	Gm7609	predicted pse	transcribed_u
0.24129724	2	176473278	176486783	-1	Gm14434	predicted gen	protein_codin
0.29862395	14	63198922	63271692	-1	Gata4	GATA binding	protein_codin
0.25941848	12	104338486	104394257	1	Serpina3m	serine (or cys	protein_codin
0.29383585	10	85096287	85102495	-1	Fhl4	four and a hal	protein_codin
0.25092602	8	57281117	57324233	-1	AV026068	expressed se	processed_tra
0.28398154	1	74153989	74161246	1	Cxcr2	chemokine (C	protein_codin
0.29898671	3	58079716	58081834	1	Gm42513	predicted gen	TEC
0.25968483	16	57266139	57292865	-1	Tmem30c	transmembra	protein_codin
0.26634169	9	72806874	72917291	1	Prtg	protogenin [S	protein_codin
0.25910571	2	126215100	126216212	1	Gm17555	predicted gen	protein_codin
0.25968483	13	75644896	75645171	1	Gm4149	predicted pse	processed_ps
0.25092602	3	157980248	157983654	1	Gm42611	predicted gen	TEC
0.31373353	10	22402883	22407470	1	Gm10825	predicted gen	lincRNA
0.24482106	1	8791923	8792162	-1	Gm15452	predicted gen	processed_ps
0.28607892	4	145464204	145467420	1	Smarca5-ps	SWI/SNF rela	transcribed_p
0.27122545	9	123306600	123317998	-1	Scp2-ps2	sterol carrier	transcribed_u
0.29074567	15	103657839	103661681	1			processed_ps
0.24129724	3	155903348	155904452	1	Gm37102	predicted gen	processed_ps
0.28539113	5	76232612	76233070	-1	Ube2n-ps1	ubiquitin-conj	processed_ps
0.24129724	3	10321712	10335681	-1	Gm38303	predicted gen	protein_codin
0.24129724	7	103455526	103464151	-1	Olfr607	olfactory rece	protein_codin
0.25645084	9	37252922	37253365	1	Gm10177	predicted gen	transcribed_p
0.24482106	12	48555308	48559885	-1	Gm1818	predicted gen	unprocessed_
0.24129724	11	101406664	101424796	-1	Gm27029	predicted gen	protein_codin
0.24129724	6	66875321	66875743	-1	Gm9794	predicted pse	processed_ps
0.24129724	5	151063546	151428163	-1	Gm42906	predicted gen	protein_codin
0.22065087	6	8259450	8597480	1	Gm45062	predicted gen	protein_codin

')

ensembl_transcript_id
ENSMUST00000118047
ENSMUST00000120190
ENSMUST00000197528
ENSMUST00000182663
ENSMUST00000078246
ENSMUST00000050143
ENSMUST00000109467
ENSMUST00000168236
ENSMUST00000174736
ENSMUST00000222206
ENSMUST00000109124,ENSMUST00000152296,ENSMUST00000164280
ENSMUST00000021004,ENSMUST00000125530,ENSMUST00000130062,ENSMUST00000133324,ENSMUST0
ENSMUST00000181953
ENSMUST00000159764
ENSMUST00000120920
ENSMUST00000210131,ENSMUST00000211334
ENSMUST00000071782
ENSMUST00000218660
ENSMUST00000121934
ENSMUST00000223443
ENSMUST00000102105
ENSMUST00000079204,ENSMUST00000200792,ENSMUST00000202326,ENSMUST00000202406
ENSMUST00000171904,ENSMUST00000205428,ENSMUST00000205626,ENSMUST00000205881,ENSMUST0
ENSMUST00000109775
ENSMUST00000033100,ENSMUST00000209590
ENSMUST00000024107,ENSMUST00000212901
ENSMUST00000084544,ENSMUST00000098046,ENSMUST00000148206,ENSMUST00000154733
ENSMUST00000015138,ENSMUST00000201399,ENSMUST00000201856,ENSMUST00000202570,ENSMUST0
ENSMUST00000163245
ENSMUST00000075869,ENSMUST00000114806,ENSMUST00000127808,ENSMUST00000132511
ENSMUST00000200694,ENSMUST00000202033
ENSMUST00000039998,ENSMUST00000108280,ENSMUST00000108281,ENSMUST00000127368,ENSMUST0
ENSMUST00000064285,ENSMUST00000161217,ENSMUST00000161494,ENSMUST00000162206,ENSMUST0
ENSMUST00000072359
ENSMUST00000006508,ENSMUST00000124259,ENSMUST00000125770,ENSMUST00000128886,ENSMUST0
ENSMUST00000098952
ENSMUST00000034090
ENSMUST00000090729,ENSMUST00000111643,ENSMUST00000151399,ENSMUST00000151647
ENSMUST00000036127,ENSMUST00000163734,ENSMUST00000172525,ENSMUST00000173102,ENSMUST0
ENSMUST00000066991
ENSMUST00000046687,ENSMUST00000084696
ENSMUST00000221792,ENSMUST00000222963
ENSMUST00000181231,ENSMUST00000181530,ENSMUST00000182264
ENSMUST00000036215
ENSMUST00000075650
ENSMUST00000119024
ENSMUST00000047687,ENSMUST00000143579
ENSMUST00000053753
ENSMUST00000139014
ENSMUST00000194477
ENSMUST00000053218
ENSMUST00000057262,ENSMUST00000187432

ENSMUST00000226652,ENSMUST00000227806
ENSMUST00000042919,ENSMUST00000105901,ENSMUST00000121797,ENSMUST00000149807,ENSMUST0
ENSMUST00000043822,ENSMUST00000108449,ENSMUST00000125050,ENSMUST00000131276,ENSMUST0
ENSMUST00000057019,ENSMUST00000184728
ENSMUST00000040275,ENSMUST00000189987
ENSMUST00000181662
ENSMUST00000000096,ENSMUST00000108045,ENSMUST00000108047
ENSMUST00000040821,ENSMUST00000127172,ENSMUST00000151870
ENSMUST00000095050
ENSMUST00000075341
ENSMUST00000050519,ENSMUST00000198608
ENSMUST00000093110,ENSMUST00000201083,ENSMUST00000201588
ENSMUST00000029742,ENSMUST00000171249,ENSMUST00000196773,ENSMUST00000200387
ENSMUST00000104998
ENSMUST00000061273,ENSMUST00000150639
ENSMUST00000017961,ENSMUST00000109425
ENSMUST00000034692,ENSMUST00000215039,ENSMUST00000215999,ENSMUST00000217198
ENSMUST00000024699
ENSMUST00000099626
ENSMUST00000095114
ENSMUST00000188288
ENSMUST00000025618,ENSMUST00000050715
ENSMUST00000000266
ENSMUST00000017881,ENSMUST00000134382,ENSMUST00000137626,ENSMUST00000144917
ENSMUST00000094892,ENSMUST00000163481
ENSMUST00000090180
ENSMUST00000100757
ENSMUST00000180923
ENSMUST00000025519,ENSMUST00000039904,ENSMUST00000102888,ENSMUST00000115295,ENSMUST0
ENSMUST00000045744,ENSMUST00000218484,ENSMUST00000218520,ENSMUST00000218966,ENSMUST0
ENSMUST00000070552,ENSMUST00000101632,ENSMUST00000102950,ENSMUST00000127371,ENSMUST0
ENSMUST00000004201,ENSMUST00000145974
ENSMUST00000092486,ENSMUST00000120336
ENSMUST00000054599
ENSMUST00000026896,ENSMUST00000191970
ENSMUST00000032262,ENSMUST00000112079,ENSMUST00000112081,ENSMUST00000133061
ENSMUST00000027377,ENSMUST00000137339
ENSMUST00000022698,ENSMUST00000164691,ENSMUST00000165654,ENSMUST00000168355,ENSMUST0
ENSMUST00000033036
ENSMUST00000006171,ENSMUST00000111901,ENSMUST00000111902,ENSMUST00000159035,ENSMUST0
ENSMUST00000089549
ENSMUST00000118753
ENSMUST00000052629,ENSMUST00000111235,ENSMUST00000125258,ENSMUST00000127052,ENSMUST0
ENSMUST00000025842
ENSMUST00000023243,ENSMUST00000186934,ENSMUST00000189874,ENSMUST00000189944,ENSMUST0
ENSMUST00000042054
ENSMUST00000023265
ENSMUST00000072600,ENSMUST00000132256,ENSMUST00000199597
ENSMUST00000052068
ENSMUST00000100941,ENSMUST00000112253,ENSMUST00000112254,ENSMUST00000126709,ENSMUST0
ENSMUST00000114230,ENSMUST00000171321,ENSMUST00000173831,ENSMUST00000174576,ENSMUST0
ENSMUST00000033918,ENSMUST00000209937
ENSMUST00000037701,ENSMUST00000150819
ENSMUST00000028836
ENSMUST00000026740,ENSMUST00000112070,ENSMUST00000126780,ENSMUST00000127905,ENSMUST0

ENSMUST00000001667,ENSMUST00000113267,ENSMUST00000113271,ENSMUST00000140690,ENSMUST0
ENSMUST00000182858
ENSMUST00000027394,ENSMUST00000160033,ENSMUST00000160282,ENSMUST00000160439,ENSMUST0
ENSMUST00000087883,ENSMUST00000123204,ENSMUST00000129611,ENSMUST00000185687,ENSMUST0
ENSMUST00000075884
ENSMUST00000180860,ENSMUST00000224036
ENSMUST00000036852
ENSMUST00000025020,ENSMUST00000122058,ENSMUST00000123670,ENSMUST00000126464,ENSMUST0
ENSMUST00000001547,ENSMUST00000139974,ENSMUST00000148046,ENSMUST00000148593
ENSMUST00000187562
ENSMUST00000062620
ENSMUST00000042196
ENSMUST00000045902,ENSMUST00000111510,ENSMUST00000143123,ENSMUST00000147617,ENSMUST0
ENSMUST00000022013
ENSMUST00000039750,ENSMUST00000199942
ENSMUST00000102921
ENSMUST00000029075
ENSMUST00000125165
ENSMUST00000054829,ENSMUST00000201333,ENSMUST00000201393,ENSMUST00000201565,ENSMUST0
ENSMUST00000021726,ENSMUST00000180015,ENSMUST00000221720,ENSMUST00000223044
ENSMUST00000018755,ENSMUST00000093109,ENSMUST00000127271,ENSMUST00000144477,ENSMUST0
ENSMUST00000031668,ENSMUST00000124686,ENSMUST00000132029,ENSMUST00000138511,ENSMUST0
ENSMUST00000028663
ENSMUST00000101208
ENSMUST00000095456,ENSMUST00000098927,ENSMUST00000110866,ENSMUST00000110867,ENSMUST0
ENSMUST00000027062,ENSMUST00000188982,ENSMUST00000190471,ENSMUST00000190719
ENSMUST00000018748,ENSMUST00000079719,ENSMUST00000121021,ENSMUST00000145647,ENSMUST0
ENSMUST00000022616,ENSMUST00000127387,ENSMUST00000128539,ENSMUST00000138191,ENSMUST0
ENSMUST00000160032
ENSMUST00000042970
ENSMUST00000024660
ENSMUST00000092639,ENSMUST00000185839,ENSMUST00000186279,ENSMUST00000186965,ENSMUST0
ENSMUST00000038876,ENSMUST00000164119,ENSMUST00000210297,ENSMUST00000210937,ENSMUST0
ENSMUST00000055018,ENSMUST00000107570,ENSMUST00000107571,ENSMUST00000107574,ENSMUST0
ENSMUST00000087629,ENSMUST00000114233,ENSMUST00000129459,ENSMUST00000137935,ENSMUST0
ENSMUST00000067495,ENSMUST00000163913,ENSMUST00000165122,ENSMUST00000165240,ENSMUST0
ENSMUST00000008032,ENSMUST00000127983,ENSMUST00000132648
ENSMUST00000002395,ENSMUST00000141425,ENSMUST00000155193,ENSMUST00000227922
ENSMUST00000008991
ENSMUST00000026552,ENSMUST00000209253,ENSMUST00000210235,ENSMUST00000210403
ENSMUST00000064481,ENSMUST00000105857,ENSMUST00000105858,ENSMUST00000105859,ENSMUST0
ENSMUST00000075161,ENSMUST00000121731,ENSMUST00000124933,ENSMUST00000141904,ENSMUST0
ENSMUST00000021903,ENSMUST00000132480
ENSMUST00000031249,ENSMUST00000199947
ENSMUST00000080726
ENSMUST00000046890,ENSMUST00000127613,ENSMUST00000133763,ENSMUST00000141804,ENSMUST0
ENSMUST00000055537,ENSMUST00000187142
ENSMUST00000077705,ENSMUST00000168003,ENSMUST00000204109,ENSMUST00000204146,ENSMUST0
ENSMUST00000098407,ENSMUST00000114195,ENSMUST00000138054
ENSMUST00000006367,ENSMUST00000140741,ENSMUST00000150717,ENSMUST00000150905,ENSMUST0
ENSMUST00000046833,ENSMUST00000169041,ENSMUST00000218531,ENSMUST00000218687,ENSMUST0
ENSMUST00000099678
ENSMUST00000032342,ENSMUST00000203103
ENSMUST00000006828,ENSMUST00000207514,ENSMUST00000208404,ENSMUST00000208792,ENSMUST0
ENSMUST00000032210,ENSMUST00000118626,ENSMUST00000121656,ENSMUST00000125728,ENSMUST0

ENSMUST00000006914,ENSMUST00000217678,ENSMUST00000218977,ENSMUST00000219523,ENSMUST0
ENSMUST00000040081,ENSMUST00000105354,ENSMUST00000105355,ENSMUST00000105357,ENSMUST0
ENSMUST00000023670,ENSMUST00000162181
ENSMUST00000061721,ENSMUST00000149750
ENSMUST00000034363
ENSMUST00000003135,ENSMUST00000185752,ENSMUST00000188895
ENSMUST00000046532,ENSMUST00000106091
ENSMUST00000051401
ENSMUST00000059287,ENSMUST00000105845,ENSMUST00000105846,ENSMUST00000144573,ENSMUST0
ENSMUST00000025196,ENSMUST00000172960,ENSMUST00000173441
ENSMUST00000035625
ENSMUST00000113438,ENSMUST00000125490,ENSMUST00000130314,ENSMUST00000136751,ENSMUST0
ENSMUST00000064174,ENSMUST00000142518,ENSMUST00000145171,ENSMUST00000147578,ENSMUST0
ENSMUST00000045286,ENSMUST00000210365
ENSMUST00000034373,ENSMUST00000117555,ENSMUST00000149057,ENSMUST00000150001
ENSMUST00000111416,ENSMUST00000192426,ENSMUST00000192638,ENSMUST00000192732,ENSMUST0
ENSMUST00000109007,ENSMUST00000109008,ENSMUST00000174416
ENSMUST00000068904,ENSMUST00000131069,ENSMUST00000141190,ENSMUST00000147662,ENSMUST0
ENSMUST00000204630
ENSMUST00000001279,ENSMUST00000098553,ENSMUST00000108116,ENSMUST00000147431,ENSMUST0
ENSMUST00000096987
ENSMUST00000028780
ENSMUST00000079772
ENSMUST00000025522,ENSMUST00000115274
ENSMUST00000035661,ENSMUST00000214057,ENSMUST00000215666,ENSMUST00000217052
ENSMUST00000028280,ENSMUST00000145423
ENSMUST00000000641,ENSMUST00000125579,ENSMUST00000203271,ENSMUST00000203911
ENSMUST00000020497,ENSMUST00000125193,ENSMUST00000138858,ENSMUST00000141184,ENSMUST0
ENSMUST00000020040
ENSMUST00000060225
ENSMUST00000053043,ENSMUST00000097772,ENSMUST00000173514,ENSMUST00000173881,ENSMUST0
ENSMUST00000085453,ENSMUST00000165682,ENSMUST00000215605,ENSMUST00000217172
ENSMUST00000027409,ENSMUST00000125948,ENSMUST00000144894
ENSMUST00000073927,ENSMUST00000101362,ENSMUST00000113710,ENSMUST00000126282,ENSMUST0
ENSMUST00000007317,ENSMUST00000125888,ENSMUST00000126460
ENSMUST00000038295,ENSMUST00000105082,ENSMUST00000186917,ENSMUST00000187285,ENSMUST0
ENSMUST00000099393
ENSMUST00000039620
ENSMUST00000000579
ENSMUST00000021674,ENSMUST00000134311,ENSMUST00000136122,ENSMUST00000140525
ENSMUST00000097648,ENSMUST00000165855,ENSMUST00000188475
ENSMUST00000022418,ENSMUST00000100806,ENSMUST00000183976,ENSMUST00000184797
ENSMUST00000097682
ENSMUST00000030765,ENSMUST00000130958,ENSMUST00000148160
ENSMUST00000073228,ENSMUST00000109858,ENSMUST00000109859,ENSMUST00000109861
ENSMUST00000042194,ENSMUST00000209239,ENSMUST00000209506,ENSMUST00000210311,ENSMUST0
ENSMUST00000040056,ENSMUST00000098134,ENSMUST00000207852,ENSMUST00000208159,ENSMUST0
ENSMUST00000082431,ENSMUST00000220569,ENSMUST00000221421
ENSMUST00000043975,ENSMUST00000108164,ENSMUST00000146548,ENSMUST00000149400,ENSMUST0
ENSMUST00000102517,ENSMUST00000127102
ENSMUST00000034369,ENSMUST00000212044,ENSMUST00000212332,ENSMUST00000212595,ENSMUST0
ENSMUST00000026120
ENSMUST00000015278,ENSMUST00000173756,ENSMUST00000174209,ENSMUST00000174215,ENSMUST0
ENSMUST00000002073,ENSMUST00000110254,ENSMUST00000163189,ENSMUST00000163214,ENSMUST0
ENSMUST00000045846,ENSMUST00000059034,ENSMUST00000113787,ENSMUST00000113788,ENSMUST0

ENSMUST00000023994,ENSMUST00000111641,ENSMUST00000131456
ENSMUST00000039631
ENSMUST00000015594,ENSMUST00000225107
ENSMUST00000084501
ENSMUST00000015791,ENSMUST00000123906,ENSMUST00000130796,ENSMUST00000149812
ENSMUST00000039662,ENSMUST00000040025,ENSMUST00000213584,ENSMUST00000214859,ENSMUST0
ENSMUST00000031090,ENSMUST00000196435,ENSMUST00000196516,ENSMUST00000196550,ENSMUST0
ENSMUST00000020702,ENSMUST00000135887
ENSMUST00000056925,ENSMUST00000097653,ENSMUST00000130846,ENSMUST00000136916,ENSMUST0
ENSMUST00000044002,ENSMUST00000110832,ENSMUST00000132677,ENSMUST00000146780,ENSMUST0
ENSMUST00000069345,ENSMUST00000115028,ENSMUST00000134262,ENSMUST00000148462,ENSMUST0
ENSMUST00000042844,ENSMUST00000132900,ENSMUST00000132940
ENSMUST00000051995,ENSMUST00000110012,ENSMUST00000110013,ENSMUST00000130624,ENSMUST0
ENSMUST00000057311
ENSMUST00000031325
ENSMUST00000074970,ENSMUST00000079130,ENSMUST00000115851,ENSMUST00000120056,ENSMUST0
ENSMUST00000021190,ENSMUST00000052515,ENSMUST00000079770,ENSMUST00000102493,ENSMUST0
ENSMUST00000012281,ENSMUST00000137213
ENSMUST00000079176,ENSMUST00000107043,ENSMUST00000107044,ENSMUST00000107045,ENSMUST0
ENSMUST00000086844,ENSMUST00000109071
ENSMUST00000098604,ENSMUST00000108236,ENSMUST00000207601,ENSMUST00000208585
ENSMUST00000120537,ENSMUST00000123375,ENSMUST00000135609,ENSMUST00000139680,ENSMUST0
ENSMUST00000087978
ENSMUST00000082432
ENSMUST00000044380,ENSMUST00000218398
ENSMUST00000030088,ENSMUST00000107449,ENSMUST00000132237
ENSMUST00000043718,ENSMUST00000143419
ENSMUST00000030808,ENSMUST00000060901,ENSMUST00000105671,ENSMUST00000105672,ENSMUST0
ENSMUST00000070085
ENSMUST00000030834,ENSMUST00000115090
ENSMUST00000033161,ENSMUST00000205520,ENSMUST00000206079
ENSMUST00000017590,ENSMUST00000106286,ENSMUST00000124861,ENSMUST00000133558
ENSMUST00000026973,ENSMUST00000110889,ENSMUST00000110890,ENSMUST00000129851,ENSMUST0
ENSMUST00000040750,ENSMUST00000066283,ENSMUST00000154927
ENSMUST00000023952
ENSMUST00000030184,ENSMUST00000107913,ENSMUST00000107914,ENSMUST00000133355,ENSMUST0
ENSMUST00000034243,ENSMUST00000212235
ENSMUST00000028308,ENSMUST00000128149,ENSMUST00000132348,ENSMUST00000136952,ENSMUST0
ENSMUST00000065220,ENSMUST00000091112,ENSMUST00000196081,ENSMUST00000196716,ENSMUST0
ENSMUST00000212253
ENSMUST00000034590,ENSMUST00000215509,ENSMUST00000216035
ENSMUST00000003628,ENSMUST00000097333,ENSMUST00000117301,ENSMUST00000119825,ENSMUST0
ENSMUST00000081747,ENSMUST00000196367,ENSMUST00000196575,ENSMUST00000199667
ENSMUST00000074157,ENSMUST00000120161,ENSMUST00000121875,ENSMUST00000122914,ENSMUST0
ENSMUST00000067538,ENSMUST00000086828,ENSMUST00000143018,ENSMUST00000223642,ENSMUST0
ENSMUST00000082303,ENSMUST00000102917,ENSMUST00000107730,ENSMUST00000107731,ENSMUST0
ENSMUST00000030568,ENSMUST00000115271,ENSMUST00000169603,ENSMUST00000170181,ENSMUST0
ENSMUST00000032961,ENSMUST00000131174,ENSMUST00000151105,ENSMUST00000187609,ENSMUST0
ENSMUST00000075253,ENSMUST00000123653,ENSMUST00000137222,ENSMUST00000139353,ENSMUST0
ENSMUST00000086861,ENSMUST00000190998
ENSMUST00000178140,ENSMUST00000213610
ENSMUST00000029658,ENSMUST00000164443,ENSMUST00000165217,ENSMUST00000169240,ENSMUST0
ENSMUST00000097778,ENSMUST00000115029,ENSMUST00000115031,ENSMUST00000115032,ENSMUST0
ENSMUST00000028469,ENSMUST00000111624,ENSMUST00000111625,ENSMUST00000121114,ENSMUST0
ENSMUST00000072177,ENSMUST00000082125,ENSMUST00000128661,ENSMUST00000133246

ENSMUST00000035952,ENSMUST00000106925,ENSMUST00000198168,ENSMUST00000198644
ENSMUST00000064794,ENSMUST00000110442,ENSMUST00000138576
ENSMUST00000009689,ENSMUST00000185383,ENSMUST00000186284,ENSMUST00000186288,ENSMUST0
ENSMUST00000033741,ENSMUST00000130873,ENSMUST00000133394,ENSMUST00000140803,ENSMUST0
ENSMUST00000057243
ENSMUST00000096106,ENSMUST00000115119,ENSMUST00000131419,ENSMUST00000132475,ENSMUST0
ENSMUST00000073350,ENSMUST00000112411,ENSMUST00000141061
ENSMUST00000093271,ENSMUST00000179619,ENSMUST00000211806,ENSMUST00000211850,ENSMUST0
ENSMUST00000031652,ENSMUST00000031653,ENSMUST00000110529,ENSMUST00000125272,ENSMUST0
ENSMUST00000217715
ENSMUST00000024179,ENSMUST00000172271,ENSMUST00000226293,ENSMUST00000226357,ENSMUST0
ENSMUST00000034478,ENSMUST00000123557,ENSMUST00000133904,ENSMUST00000148789,ENSMUST0
ENSMUST00000060174,ENSMUST00000208653,ENSMUST00000209196
ENSMUST00000103028,ENSMUST00000103029,ENSMUST00000126819,ENSMUST00000138125
ENSMUST00000099575
ENSMUST00000021168,ENSMUST00000108510,ENSMUST00000108511,ENSMUST00000132095,ENSMUST0
ENSMUST00000041142,ENSMUST00000139206,ENSMUST00000146844
ENSMUST00000047521,ENSMUST00000134152,ENSMUST00000153863,ENSMUST00000154464,ENSMUST0
ENSMUST00000221833
ENSMUST00000021459,ENSMUST00000118604,ENSMUST00000121716,ENSMUST00000122419,ENSMUST0
ENSMUST00000034650,ENSMUST00000098852,ENSMUST00000132490,ENSMUST00000147836,ENSMUST0
ENSMUST00000038743,ENSMUST00000121743,ENSMUST00000130689,ENSMUST00000136678,ENSMUST0
ENSMUST00000023803
ENSMUST00000026129,ENSMUST00000106187,ENSMUST00000106188,ENSMUST00000124468,ENSMUST0
ENSMUST00000037416,ENSMUST00000108180,ENSMUST00000125263,ENSMUST00000146748,ENSMUST0
ENSMUST00000051386,ENSMUST00000074734,ENSMUST00000126251,ENSMUST00000131647,ENSMUST0
ENSMUST00000022895,ENSMUST00000159221,ENSMUST00000161405,ENSMUST00000161532,ENSMUST0
ENSMUST00000067098
ENSMUST00000026577,ENSMUST00000127501,ENSMUST00000133669,ENSMUST00000136240,ENSMUST0
ENSMUST00000029665
ENSMUST00000024747,ENSMUST00000071648,ENSMUST00000113519,ENSMUST00000113520,ENSMUST0
ENSMUST00000031273,ENSMUST00000132213
ENSMUST00000064948,ENSMUST00000114038,ENSMUST00000114040,ENSMUST00000204053
ENSMUST00000021681
ENSMUST00000055754,ENSMUST00000105650,ENSMUST00000105651,ENSMUST00000144035
ENSMUST00000023248,ENSMUST00000186526,ENSMUST00000187171,ENSMUST00000187994,ENSMUST0
ENSMUST00000020362
ENSMUST00000090558,ENSMUST00000126349,ENSMUST00000126935,ENSMUST00000130941,ENSMUST0
ENSMUST00000060807,ENSMUST00000170153
ENSMUST00000041865,ENSMUST00000141276
ENSMUST00000094464,ENSMUST00000122222,ENSMUST00000128881,ENSMUST00000139806,ENSMUST0
ENSMUST00000164481,ENSMUST00000167598,ENSMUST00000199538,ENSMUST00000200565
ENSMUST00000062862,ENSMUST00000095360,ENSMUST00000105300,ENSMUST00000121161,ENSMUST0
ENSMUST00000054665,ENSMUST00000193083,ENSMUST00000193991,ENSMUST00000194853
ENSMUST00000046999,ENSMUST00000111216,ENSMUST00000123227,ENSMUST00000148831,ENSMUST0
ENSMUST00000078482,ENSMUST00000140959,ENSMUST00000154659
ENSMUST00000019050,ENSMUST00000093107,ENSMUST00000125132,ENSMUST00000125651,ENSMUST0
ENSMUST00000020884,ENSMUST00000095820,ENSMUST00000127185,ENSMUST00000140751,ENSMUST0
ENSMUST00000032927,ENSMUST00000163799,ENSMUST00000164479,ENSMUST00000167888,ENSMUST0
ENSMUST00000159168,ENSMUST00000159335,ENSMUST00000159378,ENSMUST00000159433,ENSMUST0
ENSMUST00000116547
ENSMUST00000031982,ENSMUST00000170252,ENSMUST00000205250
ENSMUST00000050027
ENSMUST00000037798
ENSMUST00000135042,ENSMUST00000138411,ENSMUST00000141428,ENSMUST00000166003

ENSMUST00000105733
ENSMUST00000100024
ENSMUST00000082424,ENSMUST00000159158,ENSMUST00000159216,ENSMUST00000159247,ENSMUST0
ENSMUST00000027874
ENSMUST00000225167,ENSMUST00000225802,ENSMUST00000225859
ENSMUST00000028595,ENSMUST00000144133
ENSMUST00000069309,ENSMUST00000133976,ENSMUST00000137048,ENSMUST00000139365,ENSMUST0
ENSMUST00000192003
ENSMUST00000040065,ENSMUST00000139380
ENSMUST00000181191
ENSMUST00000098509,ENSMUST00000205572,ENSMUST00000205634,ENSMUST00000205995
ENSMUST00000123149,ENSMUST00000124811,ENSMUST00000133510,ENSMUST00000136571,ENSMUST0
ENSMUST00000064656,ENSMUST00000127869,ENSMUST00000132870,ENSMUST00000138543
ENSMUST00000108007
ENSMUST00000035288,ENSMUST00000218366,ENSMUST00000218408,ENSMUST00000219280,ENSMUST0
ENSMUST00000106888,ENSMUST00000214173
ENSMUST00000099972,ENSMUST00000126312,ENSMUST00000135919,ENSMUST00000141094,ENSMUST0
ENSMUST00000028106,ENSMUST00000129370,ENSMUST00000130548,ENSMUST00000141477,ENSMUST0
ENSMUST00000026076,ENSMUST00000123957,ENSMUST00000129100,ENSMUST00000131877,ENSMUST0
ENSMUST00000006341,ENSMUST00000129665,ENSMUST00000130585,ENSMUST00000150547,ENSMUST0
ENSMUST00000070316,ENSMUST00000137840
ENSMUST00000041776,ENSMUST00000111810,ENSMUST00000111812,ENSMUST00000111814,ENSMUST0
ENSMUST00000029421,ENSMUST00000182521
ENSMUST00000179360,ENSMUST00000189432,ENSMUST00000191456,ENSMUST00000191491
ENSMUST00000029932,ENSMUST00000059091
ENSMUST00000027812,ENSMUST00000192203,ENSMUST00000192227,ENSMUST00000193798,ENSMUST0
ENSMUST00000222330
ENSMUST00000195935
ENSMUST00000219725
ENSMUST00000041591,ENSMUST00000167541,ENSMUST00000171545,ENSMUST00000173516,ENSMUST0
ENSMUST00000057793,ENSMUST00000088001,ENSMUST00000131200,ENSMUST00000139984
ENSMUST00000114766,ENSMUST00000135542
ENSMUST00000209267
ENSMUST00000178049
ENSMUST00000033211,ENSMUST00000071069,ENSMUST00000141063
ENSMUST00000100670,ENSMUST00000110261,ENSMUST00000160655,ENSMUST00000160658,ENSMUST0
ENSMUST00000141047
ENSMUST00000001046,ENSMUST00000142476
ENSMUST00000212127
ENSMUST00000011407,ENSMUST00000137613
ENSMUST00000118083,ENSMUST00000165677
ENSMUST00000033539,ENSMUST00000114085,ENSMUST00000147349,ENSMUST00000151772
ENSMUST00000099771,ENSMUST00000111532,ENSMUST00000216424
ENSMUST00000186230
ENSMUST00000195645
ENSMUST00000178904
ENSMUST00000207913
ENSMUST00000002469,ENSMUST00000110051,ENSMUST00000110052,ENSMUST00000126049
ENSMUST00000180821
ENSMUST00000099623,ENSMUST00000111019,ENSMUST00000140777
ENSMUST00000046522,ENSMUST00000066531,ENSMUST00000128462,ENSMUST00000131363,ENSMUST0
ENSMUST00000056071,ENSMUST00000193727
ENSMUST00000202887
ENSMUST00000018896,ENSMUST00000108648
ENSMUST00000065967,ENSMUST00000111166,ENSMUST00000111167,ENSMUST00000125404,ENSMUST0

ENSMUST00000180992
ENSMUST00000188810
ENSMUST00000096066,ENSMUST00000123588,ENSMUST00000126426,ENSMUST00000131137,ENSMUST0
ENSMUST00000002259,ENSMUST00000109831
ENSMUST00000223774
ENSMUST00000031291,ENSMUST00000196256,ENSMUST00000197585,ENSMUST00000198357,ENSMUST0
ENSMUST00000029670,ENSMUST00000106126,ENSMUST00000128349
ENSMUST00000035534,ENSMUST00000204444
ENSMUST00000113402,ENSMUST00000113407,ENSMUST00000160058,ENSMUST00000161424
ENSMUST00000120521,ENSMUST00000120959,ENSMUST00000122097
ENSMUST00000067417,ENSMUST00000118022,ENSMUST00000121312,ENSMUST00000132122,ENSMUST0
ENSMUST00000101078,ENSMUST00000168797
ENSMUST00000059383,ENSMUST00000216889
ENSMUST00000185635,ENSMUST00000185793,ENSMUST00000185946,ENSMUST00000186214,ENSMUST0
ENSMUST00000027372,ENSMUST00000106899
ENSMUST00000197831
ENSMUST00000023434,ENSMUST00000119407,ENSMUST00000120112
ENSMUST00000055535,ENSMUST00000184274
ENSMUST00000164042
ENSMUST00000099371
ENSMUST00000199446
ENSMUST00000180537
ENSMUST00000119877
ENSMUST00000121843,ENSMUST00000171805
ENSMUST00000072166,ENSMUST00000213851,ENSMUST00000216438
ENSMUST00000228191
ENSMUST00000195740
ENSMUST00000201768
ENSMUST00000192603
ENSMUST00000119283,ENSMUST00000214347
ENSMUST00000160052,ENSMUST00000161698
ENSMUST00000169406
ENSMUST00000107257,ENSMUST00000107259
ENSMUST00000202370
ENSMUST00000202365
ENSMUST00000162564

0000142046,ENSMUST00000149710,ENSMUST00000156953,ENSMUST00000218489,ENSMUST00000218723

0000206910

0000202620

0000151227
0000162383,ENSMUST00000162567

0000129020,ENSMUST00000129232,ENSMUST00000131565,ENSMUST00000134503,ENSMUST00000139459,

0000173640,ENSMUST00000173859,ENSMUST00000174837

0000153811
0000131602,ENSMUST00000145755,ENSMUST00000148416

0000115297,ENSMUST00000134496,ENSMUST00000137805
0000219479,ENSMUST00000219958
0000135250,ENSMUST00000155197

0000169106,ENSMUST00000169599,ENSMUST00000171481,ENSMUST00000171864

0000161320,ENSMUST00000161611,ENSMUST00000162367,ENSMUST00000164600

0000127482,ENSMUST00000128638,ENSMUST00000132141,ENSMUST00000135267,ENSMUST00000140814,

0000190119

0000129436,ENSMUST00000134073,ENSMUST00000139678,ENSMUST00000141521,ENSMUST00000146264,
0000178857,ENSMUST00000179593

0000138588,ENSMUST00000149142,ENSMUST00000192424,ENSMUST00000198997

0000144929,ENSMUST00000148793

0000160903,ENSMUST00000161106,ENSMUST00000161657,ENSMUST00000162768,ENSMUST00000186227
0000186021,ENSMUST00000189818,ENSMUST00000190943

0000127594,ENSMUST00000139639,ENSMUST00000146683,ENSMUST00000147220,ENSMUST00000152299,

0000156860,ENSMUST00000194061,ENSMUST00000194197

0000201625,ENSMUST00000201672,ENSMUST00000201697,ENSMUST00000201937,ENSMUST00000202007,

0000151948
0000141483,ENSMUST00000148864,ENSMUST00000155687,ENSMUST00000203346

0000110871,ENSMUST00000110873,ENSMUST00000110876,ENSMUST00000110879,ENSMUST00000123811,

0000154680,ENSMUST00000202034
0000138665,ENSMUST00000144619,ENSMUST00000146990,ENSMUST00000152903,ENSMUST00000153460

0000187535,ENSMUST00000188963,ENSMUST00000189575,ENSMUST00000219763
0000210939
0000107575,ENSMUST00000145361,ENSMUST00000147354,ENSMUST00000155170
0000200810,ENSMUST00000201028
0000167303,ENSMUST00000208062

0000105860,ENSMUST00000123632,ENSMUST00000134717,ENSMUST00000154518
0000152029,ENSMUST00000205926

0000148975,ENSMUST00000149548,ENSMUST00000153081,ENSMUST00000209500,ENSMUST00000209760,

0000205228

0000153290
0000219305,ENSMUST00000219734

0000209054
0000126357,ENSMUST00000142896,ENSMUST00000148517

0000220055
0000105358,ENSMUST00000153167,ENSMUST00000186864

0000151502,ENSMUST00000156558

0000167391,ENSMUST00000203690
0000150495

0000193860,ENSMUST00000194964,ENSMUST00000195557

0000153021,ENSMUST00000183401

0000205961

0000143793,ENSMUST00000146640,ENSMUST00000147381

0000174335

0000138162,ENSMUST00000144410,ENSMUST00000151922

0000187299,ENSMUST00000189598,ENSMUST00000190186,ENSMUST00000190208,ENSMUST00000190694,

0000210541,ENSMUST00000210639,ENSMUST00000211411,ENSMUST00000211431,ENSMUST00000211743
0000208504,ENSMUST00000208956

0000156241

0000212686,ENSMUST00000212876,ENSMUST00000212938

0000174701
0000165141,ENSMUST00000166383,ENSMUST00000168699
0000134392,ENSMUST00000138489,ENSMUST00000148179,ENSMUST00000149362,ENSMUST00000203035

0000215267,ENSMUST00000215593,ENSMUST00000215784,ENSMUST00000216799,ENSMUST00000217550
0000199919

0000145750,ENSMUST00000150769,ENSMUST00000187753,ENSMUST00000188587
0000147328
0000151930

0000133263

0000124977,ENSMUST00000125140
0000108391,ENSMUST00000130255

0000107046,ENSMUST00000107047,ENSMUST00000116287,ENSMUST00000135255,ENSMUST00000138830,

0000141996,ENSMUST00000152768

0000116257,ENSMUST00000126707,ENSMUST00000135169,ENSMUST00000139826,ENSMUST00000146133

0000130180,ENSMUST00000134762,ENSMUST00000139415,ENSMUST00000141985,ENSMUST00000147505,

0000150262,ENSMUST00000150592

0000142087,ENSMUST00000150165,ENSMUST00000155893
0000197220,ENSMUST00000197841,ENSMUST00000198838,ENSMUST00000200358,ENSMUST00000200673

0000134995,ENSMUST00000135078,ENSMUST00000145900,ENSMUST00000146472,ENSMUST00000148065,

0000125751,ENSMUST00000125882,ENSMUST00000135878,ENSMUST00000140904,ENSMUST00000146253,
0000223671,ENSMUST00000223685,ENSMUST00000223691,ENSMUST00000223706,ENSMUST00000223742,
0000124105,ENSMUST00000140094,ENSMUST00000140413,ENSMUST00000146967,ENSMUST00000148103
0000170348
0000191192,ENSMUST00000191413
0000141325,ENSMUST00000145683,ENSMUST00000146718

0000170918
0000116629,ENSMUST00000124280,ENSMUST00000126413,ENSMUST00000137906,ENSMUST00000140218,
0000145004,ENSMUST00000146816

0000186488,ENSMUST00000186798,ENSMUST00000187213
0000141945,ENSMUST00000155231,ENSMUST00000169489,ENSMUST00000183174

0000135753,ENSMUST00000142355,ENSMUST00000143297,ENSMUST00000149773

0000211911,ENSMUST00000211944,ENSMUST00000211984,ENSMUST00000212118,ENSMUST00000212141,
0000142477,ENSMUST00000200895

0000226536,ENSMUST00000226716,ENSMUST00000226834,ENSMUST00000226869,ENSMUST00000226979,
0000214418,ENSMUST00000217404

0000138339,ENSMUST00000150531

0000155355

0000134124,ENSMUST00000141622,ENSMUST00000143863,ENSMUST00000154765
0000149241,ENSMUST00000216002
0000144751,ENSMUST00000145034,ENSMUST00000148313

0000124504,ENSMUST00000126148,ENSMUST00000126723,ENSMUST00000134671,ENSMUST00000142049,
0000149201,ENSMUST00000156430,ENSMUST00000171600
0000135872,ENSMUST00000136561,ENSMUST00000141185,ENSMUST00000151638,ENSMUST00000153454,
0000161933,ENSMUST00000228589

0000136736,ENSMUST00000140025,ENSMUST00000143633,ENSMUST00000145108,ENSMUST00000146042,

0000133605,ENSMUST00000142321,ENSMUST00000142351,ENSMUST00000143985,ENSMUST00000146149,

0000189068,ENSMUST00000190188

0000133216,ENSMUST00000147251,ENSMUST00000147565

0000140617,ENSMUST00000147270

0000121952,ENSMUST00000122100,ENSMUST00000122386,ENSMUST00000126490

0000149778,ENSMUST00000154469,ENSMUST00000201890

0000126840,ENSMUST00000129499,ENSMUST00000135596,ENSMUST00000135653,ENSMUST00000138477,
0000143131,ENSMUST00000153090,ENSMUST00000156727,ENSMUST00000221129,ENSMUST00000222103
0000172630,ENSMUST00000172662,ENSMUST00000173270,ENSMUST00000174083,ENSMUST00000174140,
0000160253,ENSMUST00000160705,ENSMUST00000161400,ENSMUST00000162034

0000160311,ENSMUST00000160787,ENSMUST00000160930

0000143286,ENSMUST00000143958,ENSMUST00000150715,ENSMUST00000154004,ENSMUST00000154527,

0000138606,ENSMUST00000138653,ENSMUST00000139444,ENSMUST00000144612,ENSMUST00000146778,

0000219341,ENSMUST00000219612,ENSMUST00000219659

0000155105
0000148055,ENSMUST00000172716,ENSMUST00000172791
0000135730,ENSMUST00000138530,ENSMUST00000140141,ENSMUST00000152507,ENSMUST00000169850
0000223857

0000111815,ENSMUST00000124500,ENSMUST00000147482,ENSMUST00000147700,ENSMUST00000147794,

0000194288,ENSMUST00000194555,ENSMUST00000195324,ENSMUST00000195477

0000226339,ENSMUST00000227057,ENSMUST00000227483,ENSMUST00000228222,ENSMUST00000228823

0000160716,ENSMUST00000161173,ENSMUST00000161653,ENSMUST00000162006,ENSMUST00000162830

0000153999

0000144340,ENSMUST00000156184

0000133009,ENSMUST00000142653,ENSMUST00000144282,ENSMUST00000146936

0000199095,ENSMUST00000199906,ENSMUST00000200227

0000137244,ENSMUST00000156782

0000186386,ENSMUST00000187461,ENSMUST00000187718,ENSMUST00000189098,ENSMUST00000189143,

,ENSMUST00000140219,ENSMUST00000141062,ENSMUST00000143226,ENSMUST00000143792,ENSMUST0(

,ENSMUST00000140816,ENSMUST00000141888,ENSMUST00000150855,ENSMUST00000155426,ENSMUST0

,ENSMUST00000147101,ENSMUST00000150548

,ENSMUST00000152676,ENSMUST00000155072

,ENSMUST00000202384

,ENSMUST00000126905,ENSMUST00000127229,ENSMUST00000130302,ENSMUST00000134227,ENSMUST0

,ENSMUST00000210993

,ENSMUST00000190884,ENSMUST00000212142,ENSMUST00000212252

,ENSMUST00000139708,ENSMUST00000151123,ENSMUST00000208812

,ENSMUST00000148002,ENSMUST00000155833

,ENSMUST00000155628,ENSMUST00000155957,ENSMUST00000166980

,ENSMUST00000154986,ENSMUST00000177366
,ENSMUST00000223783,ENSMUST00000223859,ENSMUST00000224006,ENSMUST00000224193,ENSMUST0

,ENSMUST00000141121,ENSMUST00000142319,ENSMUST00000145179,ENSMUST00000147123,ENSMUST0

,ENSMUST00000212531,ENSMUST00000212581,ENSMUST00000212660,ENSMUST00000212799,ENSMUST0

,ENSMUST00000227746,ENSMUST00000228308

,ENSMUST00000143502,ENSMUST00000145356,ENSMUST00000160059

,ENSMUST00000153630

,ENSMUST00000155729,ENSMUST00000210158,ENSMUST00000210251

,ENSMUST00000150327,ENSMUST00000167860,ENSMUST00000214739,ENSMUST00000217017

,ENSMUST00000139315,ENSMUST00000141258,ENSMUST00000142583,ENSMUST00000151218,ENSMUST0

,ENSMUST00000174291,ENSMUST00000210192

,ENSMUST00000154666,ENSMUST00000157073,ENSMUST00000185837

,ENSMUST00000151076,ENSMUST00000151800,ENSMUST00000152157,ENSMUST00000153057,ENSMUST0

,ENSMUST00000152114

,ENSMUST00000189169,ENSMUST00000211191,ENSMUST00000223626,ENSMUST00000223675,ENSMUST0

0000145079,ENSMUST00000145928,ENSMUST00000148447,ENSMUST00000151212,ENSMUST00000152657,

0000193620

0000134989,ENSMUST00000138387,ENSMUST00000139776,ENSMUST00000145067,ENSMUST00000145892,

0000224522,ENSMUST00000224571,ENSMUST00000224777,ENSMUST00000225104,ENSMUST00000225379,

0000150747,ENSMUST00000192874

0000212956,ENSMUST00000212976,ENSMUST00000212995

0000155299,ENSMUST00000174616

0000155345,ENSMUST00000201375

0000223799,ENSMUST00000223828,ENSMUST00000223874,ENSMUST00000223961,ENSMUST00000223980,

ENSMUST00000155186,ENSMUST00000156487

ENSMUST00000156405,ENSMUST00000156560,ENSMUST00000173006,ENSMUST00000173099

,ENSMUST00000225381,ENSMUST00000225456,ENSMUST00000225785

,ENSMUST00000224148,ENSMUST00000224153,ENSMUST00000224335,ENSMUST00000224717,ENSMUST0(

0000224792,ENSMUST00000224827,ENSMUST00000225042,ENSMUST00000225073,ENSMUST00000225291,

ENSMUST00000225514,ENSMUST00000225516,ENSMUST00000225650,ENSMUST00000225862,ENSMUST0(

0000225887,ENSMUST00000225933,ENSMUST00000225995,ENSMUST00000225999,ENSMUST00000226014,

ENSMUST00000226075

Table S1B. Cardiovascular-related significantly changed

General pathway
eNOS signaling
eNOS signaling
eNOS signaling
eNOS signaling
eNOS signaling
Leucocyte Adhesion and Endothelial permebility
Extracellular matrix & collagen-mediated pathways
Actin intracelular signaling
Cell signalling

l Ingenuity Pathway Analysis (IPA) from RNAseq Gene expression in MLECs from miR-217KI apoE-/- (KI)

Ingenuity Canonical Pathways	-log(B-H p-v	Ratio (KI/Wt)
Apelin Liver Signaling Pathway	3.55	0.231
VEGF Signaling	1.32	0.0594
Gαi /LPA Signaling	1.92	0.064
cAMP-mediated signaling	1.19	0.0396
eNOS Signaling	1.09	0.0438
Leukocyte Extravasation Signaling	1.09	0.0402
Leucocyte Adhesion and Diapedesis	2.23	0.0573
Tight Junction Signaling	2.11	0.0595
Gap Junction Signaling	1.41	0.0452
Sertoli Cell-Sertoli Cell Junction Signaling	1.94	0.0538
GP6 Signaling Pathway (collagen-induced platelet aggregation ar	2.94	0.0833
Atherosclerosis Signaling	1.92	0.0645
Prothrombin Activation Pathway	1.97	0.119
Clathrin-mediated Endocytosis Signaling	1.46	0.0464
ILK Signaling	1.46	0.0469
Paxillin Signaling	1.22	0.0545
RhoA Signaling	1.09	0.0488
Caveolar-mediated Endocytosis Signaling	1.3	0.0685
Pregnenolone/corticosteoirds Biosynthesis	1.74	0.231
IGF-1 Signaling	1.73	0.0667
Histidine Degradation VI	1.6	0.2
Ubiquinol-10 Biosynthesis	1.46	0.176
Cardiac Hypertrophy Signaling	1.46	0.0329
IL-8 Signaling	1.09	0.04
RAR Activation	1.11	0.0412

or Control apoE-/- (wt) mice (p<0,05; LogFC >1<-1). P-values were corrected for multiple testing using the Benjam

z-score	Molecules
-2.449	APLNR,COL1A1,COL1A2,COL3A1,COL5A3,PDGFRB
-2.449	ACTA2,ACTG2,FLT1,NOS3,SFN,VEGFA
-0.707	ADCY2,APLNR,CXCR2,LPAR1,P2RY14,PRKAR1B,RGS7,S1PR3
-1.667	ADCY2,APLNR,CAMK2A,CXCR2,LPAR1,P2RY14,PRKAR1B,RGS7,S1PR3
-2.449	ADCY2,FLT1,LPAR1,NOS3,NOSTRIN,PRKAR1B,VEGFA
-1.342	ACTA2,ACTG2,CLDN4,CLDN6,ITGA4,JAM2,MMP15,MMP9
NA	ACTA2,ACTG2,CCL21,CLDN4,CLDN6,CXCR2,ITGA4,MMP15,MMP9,MYL7,SELE, IL1RL1, TNFRS
NA	ACTA2,ACTG2,CLDN4,CLDN6,FOS,JAM2,MYL7,PRKAR1B,TJP3,TNFRSF11B
NA	ACTA2,ACTG2,ADCY2,CCN3,GJA4,GJA5,GJB3,LPAR1,PRKAR1B
NA	ACTA2,ACTG2,CLDN4,CLDN6,ITGA4,JAM2,NOS3,PRKAR1B,SPTBN2,TJP3
-3.162	COL15A1,COL1A1,COL1A2,COL3A1,COL5A1,COL5A3,COL6A3,COL7A1,LAMA2,LAMA5
NA	CLU,COL1A1,COL1A2,COL3A1,COL5A3,ITGA4,MMP9,SELE
-1.342	COL1A1,COL1A2,COL3A1,COL5A3,F8
NA	ACTA2,ACTG2,CLU,EPHB2,FGF12,FGF7,IGF1,ITGB5,VEGFA
-2.646	ACTA2,ACTG2,BMP2,FOS,ITGB5,KRT18,MMP9,MYL7,VEGFA
-1	ACTA2,ACTG2,ITGA4,ITGA8,ITGB5,TLN2
-2.449	ACTA2,ACTG2,IGF1,LPAR1,MYL7,SEPT5
NA	ACTA2,ACTG2,ITGA4,ITGA8,ITGB5
0	CYP26B1,CYP2E1,CYP7B1
0	CCN3,FOS,IGF1,IGFBP3,IGFBP5,PRKAR1B,SFN
0	CYP26B1,CYP2E1,CYP7B1
0	CYP26B1,CYP2E1,CYP7B1
-1.807	ADCY2,CAMK2A,CXCR2,FGF12,FGF7,GATA4,IGF1,IL11,IL1RL1,ITGA4,LIF,NFATC4,PRKAR1B,T
-1.89	CXCR2,FLT1,FOS,ITGB5,MMP9,MYL7,PLD5,VEGFA
NA	ADCY2,ALDH1A3,BMP2,FOS,IGFBP3,PRKAR1B,RBP1,VEGFA

ini-Hochberg (B-H) false discovery rate.

SF11B

NFRSF11B,TNFSF13,WNT11

Tables S1C. Significantly changed IPA pathway analysis from RNAseq Gene expression in MLECs

Ingenuity Canonical Pathways	**-log(B-H p-value)**	**Ratio (KI/Wt)**
Hepatic Fibrosis / Hepatic Stellate Cell Activation	9.87	0.113
Apelin Liver Signaling Pathway	3.55	0.231
GP6 Signaling Pathway	2.94	0.0833
Role of Osteoblasts, Osteoclasts and Chondrocytes in F	2.72	0.0588
Axonal Guidance Signaling	2.66	0.0411
Osteoarthritis Pathway	2.4	0.0563
Agranulocyte Adhesion and Diapedesis	2.23	0.0573
Tight Junction Signaling	2.11	0.0595
Neuroprotective Role of THOP1 in Alzheimer's Disease	1.99	0.069
Granulocyte Adhesion and Diapedesis	1.99	0.0559
Intrinsic Prothrombin Activation Pathway	1.97	0.119
Sertoli Cell-Sertoli Cell Junction Signaling	1.94	0.0538
Atherosclerosis Signaling	1.92	0.0645
Gαi Signaling	1.92	0.064
Pregnenolone Biosynthesis	1.74	0.231
IGF-1 Signaling	1.73	0.0667
Histidine Degradation VI	1.6	0.2
Clathrin-mediated Endocytosis Signaling	1.46	0.0464
ILK Signaling	1.46	0.0469
Role of Macrophages, Fibroblasts and Endothelial Cells	1.46	0.0383
Ubiquinol-10 Biosynthesis (Eukaryotic)	1.46	0.176
Cardiac Hypertrophy Signaling (Enhanced)	1.46	0.0329
Gap Junction Signaling	1.41	0.0452
Cardiomyocyte Differentiation via BMP Receptors	1.37	0.15
Cellular Effects of Sildenafil (Viagra)	1.37	0.0534
VEGF Signaling	1.32	0.0594
Human Embryonic Stem Cell Pluripotency	1.31	0.0515
Caveolar-mediated Endocytosis Signaling	1.3	0.0685
Colorectal Cancer Metastasis Signaling	1.3	0.0394
Hepatic Cholestasis	1.22	0.0435
Pancreatic Adenocarcinoma Signaling	1.22	0.0545
Paxillin Signaling	1.22	0.0545
cAMP-mediated signaling	1.19	0.0396
RAR Activation	1.11	0.0412
Role of NANOG in Mammalian Embryonic Stem Cell Plu	1.09	0.05
Leukocyte Extravasation Signaling	1.09	0.0402
IL-8 Signaling	1.09	0.04
RhoA Signaling	1.09	0.0488
eNOS Signaling	1.09	0.0438

from miR-217KI apoE-/- (KI) or Control apoE-/- (wt) mice (p<0,05; LogFC >1<-1). P-values were corr

z-score	Molecules
#NUM!	ACTA2,CCL21,COL15A1,COL1A1,COL1A2,COL3A1,COL5A1,COL5A3,COL6A3,COL
-2.449	APLNR,COL1A1,COL1A2,COL3A1,COL5A3,PDGFRB
-3.162	COL15A1,COL1A1,COL1A2,COL3A1,COL5A1,COL5A3,COL6A3,COL7A1,LAMA2,LA
	BMP2,BMP5,COL1A1,DKK2,DKK3,FOS,IGF1,IL11,IL1RL1,NFATC4,Tcf7,TNFRSF11E
	Adam1a,ADAMTS14,ADAMTS9,BMP2,BMP5,EPHB2,IGF1,ITGA4,MMP15,MMP9,MYL
-0.905	BMP2,CXCR2,ELF3,GREM1,HTRA1,IL1RL1,ITGA4,MMP9,S1PR3,SOX9,Tcf7,VEGFA
	ACTA2,ACTG2,CCL21,CLDN4,CLDN6,CXCR2,ITGA4,MMP15,MMP9,MYL7,SELE
	ACTA2,ACTG2,CLDN4,CLDN6,FOS,JAM2,MYL7,PRKAR1B,TJP3,TNFRSF11B
-0.378	HTRA1,HTRA3,MMP9,NTS,PRKAR1B,PRSS16,SERPINA3,ST14
	CCL21,CLDN4,CLDN6,CXCR2,IL1RL1,ITGA4,MMP15,MMP9,SELE,TNFRSF11B
-1.342	COL1A1,COL1A2,COL3A1,COL5A3,F8
	ACTA2,ACTG2,CLDN4,CLDN6,ITGA4,JAM2,NOS3,PRKAR1B,SPTBN2,TJP3
	CLU,COL1A1,COL1A2,COL3A1,COL5A3,ITGA4,MMP9,SELE
-0.707	ADCY2,APLNR,CXCR2,LPAR1,P2RY14,PRKAR1B,RGS7,S1PR3
	CYP26B1,CYP2E1,CYP7B1
	CCN3,FOS,IGF1,IGFBP3,IGFBP5,PRKAR1B,SFN
	CYP26B1,CYP2E1,CYP7B1
	ACTA2,ACTG2,CLU,EPHB2,FGF12,FGF7,IGF1,ITGB5,VEGFA
-2.646	ACTA2,ACTG2,BMP2,FOS,ITGB5,KRT18,MMP9,MYL7,VEGFA
	CAMK2A,DKK2,DKK3,FOS,IL1RL1,NFATC4,SELE,Tcf7,Tlr13,TNFRSF11B,VEGFA,W
	CYP26B1,CYP2E1,CYP7B1
-1.807	ADCY2,CAMK2A,CXCR2,FGF12,FGF7,GATA4,IGF1,IL11,IL1RL1,ITGA4,LIF,NFATC4
	ACTA2,ACTG2,ADCY2,CCN3,GJA4,GJA5,GJB3,LPAR1,PRKAR1B
	BMP2,BMP5,GATA4
	ACTA2,ACTG2,ADCY2,KCNN4,MYL7,NOS3,PRKAR1B
-2.449	ACTA2,ACTG2,FLT1,NOS3,SFN,VEGFA
	BMP2,BMP5,NGF,PDGFRB,S1PR3,Tcf7,WNT11
	ACTA2,ACTG2,ITGA4,ITGA8,ITGB5
-2.53	ADCY2,FOS,JAK3,MMP15,MMP9,PRKAR1B,Tcf7,Tlr13,VEGFA,WNT11
	ADCY2,CYP7B1,IL11,IL1RL1,LIF,PRKAR1B,TNFRSF11B,TNFSF13
-2	CYP2E1,E2F2,JAK3,MMP9,PLD5,VEGFA
-1	ACTA2,ACTG2,ITGA4,ITGA8,ITGB5,TLN2
-1.667	ADCY2,APLNR,CAMK2A,CXCR2,LPAR1,P2RY14,PRKAR1B,RGS7,S1PR3
	ADCY2,ALDH1A3,BMP2,FOS,IGFBP3,PRKAR1B,RBP1,VEGFA
	BMP2,BMP5,GATA4,JAK3,LIF,WNT11
-1.342	ACTA2,ACTG2,CLDN4,CLDN6,ITGA4,JAM2,MMP15,MMP9
-1.89	CXCR2,FLT1,FOS,ITGB5,MMP9,MYL7,PLD5,VEGFA
-2.449	ACTA2,ACTG2,IGF1,LPAR1,MYL7,SEPT5
-2.449	ADCY2,FLT1,LPAR1,NOS3,NOSTRIN,PRKAR1B,VEGFA

ected for multiple testing using the Benjamini-Hochberg (B-H) false discovery rate.

.7A1,CYP2E1,FLT1,IGF1,IGFBP3,IGFBP5,IL1RL1,MMP9,MYL7,PDGFRB,TNFRSF11B,VEGFA

.MA5
3,WNT11
_7,NFATC4,NGF,PAPPA,PRKAR1B,SEMA3C,SEMA3G,SEMA4F,VEGFA,WNT11
\

/NT11

ł,PRKAR1B,TNFRSF11B,TNFSF13,WNT11

Table S1D Significantly changed IPA " Cardiovascular Development and Functions" analy

Categories

Cardiovascular System Development and Function,Organismal Development
Cardiovascular System Development and Function
Cardiovascular System Development and Function,Organismal Development
Cardiovascular System Development and Function
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Embryonic Development,Organ Deve
Cardiovascular System Development and Function
Cardiovascular Disease,Cardiovascular System Development and Function,Organismal I
Cardiovascular Disease,Cardiovascular System Development and Function,Organismal I
Cardiovascular System Development and Function,Cellular Movement
Cardiovascular System Development and Function
Cardiovascular Disease,Cardiovascular System Development and Function
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Organismal Development,Visual Syst
Cardiovascular Disease,Cardiovascular System Development and Function,Organismal I
Cardiovascular System Development and Function,Organismal Development,Visual Syst
Cardiovascular System Development and Function
Cardiovascular Disease,Cardiovascular System Development and Function,Organismal I
Cardiovascular System Development and Function,Embryonic Development,Organ Deve
Cardiovascular System Development and Function
Cardiovascular System Development and Function,Hematological System Development
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Organismal Development,Tissue Mor
Cardiovascular System Development and Function,Cellular Development,Cellular Functi
Cardiovascular System Development and Function,Cellular Movement
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Organ Development
Cardiovascular System Development and Function,Ophthalmic Disease,Organismal Dev
Cardiovascular System Development and Function,Cellular Development,Cellular Functi
Cardiovascular System Development and Function,Organismal Development,Tissue Mor
Cardiovascular System Development and Function,Tissue Development
Cardiovascular System Development and Function,Embryonic Development,Hematologi
Cardiovascular System Development and Function,Organismal Development
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Organ Morphology,Organismal Devel
Cardiovascular System Development and Function,Embryonic Development,Organismal
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function
Cardiovascular System Development and Function,Connective Tissue Development and
Cardiovascular System Development and Function,Hematological System Development
Cardiovascular System Development and Function,Cellular Movement
Cardiovascular System Development and Function,Tissue Morphology
Cardiovascular System Development and Function,Organismal Development,Tissue Mor
Cardiovascular System Development and Function,Organismal Development
Cardiovascular System Development and Function,Embryonic Development,Organ Deve
Cardiovascular System Development and Function,Cell Morphology,Organismal Develop
Cardiovascular Disease,Cardiovascular System Development and Function,Organ Morph
Cardiovascular System Development and Function,Organ Development
Cardiovascular System Development and Function,Organismal Development,Visual Syst

ysis from RNAseq Gene expression in MLECs from miR-217KI apoE-/- (KI) or Control apoE-/- (wt) mice (p<

Function	Diseases or Functions Annotation	p-value	B-H p-value
angiogenesis	Angiogenesis	2.02E-21	9.9E-18
development	Development of vasculature	3.2E-21	1.04E-17
vasculogenesis	Vasculogenesis	1.16E-13	8.75E-11
morphology	Morphology of vasculature	1.71E-12	8.35E-10
morphology	Morphology of blood vessel	4.05E-12	1.47E-09
cardiogenesis	Cardiogenesis	3.11E-11	7.62E-09
morphology	Morphology of cardiovascular system	9.13E-11	1.75E-08
abnormal morphology	Abnormal morphology of vasculature	1.04E-10	1.96E-08
abnormal morphology	Abnormal morphology of blood vessel	1.77E-10	3.1E-08
cell movement	Cell movement of endothelial cells	4.66E-09	5.01E-07
vascularization	Vascularization	6.18E-09	6.32E-07
abnormal morphology	Abnormal morphology of cardiovascular syste	7.07E-09	6.92E-07
relaxation	Relaxation of artery	6.19E-08	0.00000384
vascularization	Vascularization of eye	1.29E-07	0.00000674
abnormal morphology	Abnormal morphology of artery	0.00000019	0.00000919
neovascularization	Neovascularization of eye	0.0000003	0.0000136
morphogenesis	Morphogenesis of cardiovascular system	3.46E-07	0.0000153
abnormal morphology	Abnormal morphology of aorta	3.84E-07	0.0000169
morphogenesis	Morphogenesis of heart	0.0000005	0.0000214
neovascularization	Neovascularization	0.0000005	0.0000214
blood pressure	Blood pressure	5.61E-07	0.0000236
permeability	Permeability of vascular system	5.98E-07	0.0000247
size	Size of vessel	6.43E-07	0.0000262
proliferation	Proliferation of endothelial progenitor cells	7.12E-07	0.000029
migration	Migration of endothelial cells	8.09E-07	0.000032
permeability	Permeability of vasculature	0.00000101	0.0000392
permeability	Permeability of blood vessel	0.00000116	0.0000436
heart rate	Heart rate	0.00000146	0.0000524
neovascularization	Neovascularization of choroid	0.00000203	0.0000686
development	Endothelial cell development	0.00000261	0.0000857
size	Size of blood vessel	0.00000297	0.0000949
accumulation	Accumulation of endothelial cells	0.00000298	0.0000949
development	Development of lymph vessel	0.00000987	0.00026
formation	Formation of blood vessel	0.0000118	0.000305
morphology	Morphology of capillary vessel	0.0000137	0.000348
morphology	Morphology of heart	0.0000147	0.00037
morphogenesis	Morphogenesis of outflow tract	0.0000175	0.000424
relaxation	Relaxation of mesenteric artery	0.0000193	0.000457
morphology	Morphology of vessel component	0.0000204	0.000477
development	Development of pericardium	0.0000255	0.000584
systolic pressure	Systolic pressure	0.0000262	0.000598
movement	Movement of vascular endothelial cells	0.0000266	0.000602
remodeling	Remodeling of vascular tissue	0.0000275	0.000612
quantity	Quantity of blood vessel	0.0000291	0.000641
development	Development of artery	0.000031	0.000676
formation	Formation of heart ventricle	0.0000419	0.000878
branching	Branching of blood vessel	0.0000439	0.000912
abnormal morphology	Abnormal morphology of heart	0.0000498	0.001
heart beat	Heart beat	0.0000498	0.001
vascularization	Vascularization of cornea	0.0000564	0.00111

<0,05; LogFC >1<-1). P-values were corrected for multiple testing using the Benjamini-Hochberg (B-H) false disc

Predicted Activation Sta	Activation z-s	Molecules	# Molecules
Decreased	-2.416	ADGRG1,ADI	73
Decreased	-2.416	ACTA2,ADGF	78
Decreased	-2.284	APLNR,BMP2	53
		ACTA2,BMP2	33
		ACTA2,BMP2	29
	-0.904	APLNR,BMP2	38
		ACTA2,ACTG	53
		ACTA2,BMP2	28
		ACTA2,BMP2	24
Decreased	-2.105	BMP2,CLEC1	28
	-1.423	B4GALNT1,B	21
		ACTA2,ACTG	46
Decreased	-2.275	ADM2,FLT1,C	9
	-1.116	CXCR2,FLT1	13
		ACTA2,BMP2	14
	-1.105	FLT1,Gm215	12
	-1.122	BMP2,BMP5,	19
		ACTA2,COL3	9
		BMP2,BMP5,	15
	-1.131	FLT1,FOS,Gr	15
Increased	2.331	ACTA2,ADM2	21
	0.352	ACTA2,CXCF	15
		DDR1,HSD11	8
	0.391	CXCR2,KCNJ	5
Decreased	-2.167	BMP2,CLEC1	23
	0.249	ACTA2,CXCF	12
	-0.367	ACTA2,CXCF	11
	-0.972	ACTG2,APLN	19
	-1.294	FLT1,Gm215	8
	-1.748	BMP2,CLEC1	23
		DDR1,HSD11	7
		FLT1,Gm215	3
		CCL21,CLEC	6
	-0.226	APLNR,EMP3	13
		CLU,COL15A	7
		ACTG2,ADAM	36
		ELN,GATA4,C	7
	-1.948	ADM2,GAL,IC	4
		COL3A1,DDF	8
		BMP2,BMP5,	5
	1.112	ACTA2,E2F2,	11
	-0.952	CXCR2,DIO2	14
	-1.982	EPHB2,PDGF	4
	-1.176	ADAMTS9,BM	8
	0.9	DLL4,ELN,EM	11
		BMP2,GATA4	9
Decreased	-2.412	DLL4,EPHB2,	6
		ACTG2,ADAM	33
		ENPP2,GATA	6
		CXCR2,FLT1	6

overy rate.

Table S1E. Significantly changed IPA " Cardiovascular Disease " analysis from RNAseq Gene expression in MLE

Categories	Diseases or Functions Annotation	p-value
Cardiovascular Disease,Cardiovascular System De	Abnormal morphology of vasculature	1.04E-10
Cardiovascular Disease,Cardiovascular System De	Abnormal morphology of blood vessel	1.77E-10
Cardiovascular Disease,Cardiovascular System De	Abnormal morphology of cardiovascular systen	7.07E-09
Cardiovascular Disease	Vascular lesion	5.72E-08
Cardiovascular Disease,Cardiovascular System De	Abnormal morphology of artery	0.00000019
Cardiovascular Disease,Cardiovascular System De	Abnormal morphology of aorta	3.84E-07
Cardiovascular Disease,Organismal Injury and Abn	Infarction	5.66E-07
Cardiovascular Disease	Hypertension	7.23E-07
Cardiovascular Disease,Organismal Injury and Abn	Aortic dilatation	0.00000106
Cardiovascular Disease,Hereditary Disorder,Organ	Familial aortic disorder	0.00000117
Cardiovascular Disease,Hereditary Disorder,Organ	Familial thoracic aortic aneurysms and dissecti	0.00000122
Cardiovascular Disease	Congestion of vasculature	0.00000127
Cardiovascular Disease,Organismal Injury and Abn	Aortic aneurysm	0.00000423
Cardiovascular Disease	Aneurysm	0.00000449
Cardiovascular Disease,Organismal Injury and Abn	Arteriosclerosis	0.0000055
Cardiovascular Disease,Hereditary Disorder,Organ	Familial cardiovascular disease	0.00000605
Cardiovascular Disease,Organismal Injury and Abn	Size of atherosclerotic lesion	0.00000618
Cardiovascular Disease,Organismal Injury and Abn	Thoracic aortic aneurysms and dissections	0.00000823
Cardiovascular Disease	Occlusion of blood vessel	0.00000946
Cardiovascular Disease,Organismal Injury and Abn	Vaso-occlusion	0.0000123
Cardiovascular Disease,Developmental Disorder,O	Hypoplasia of artery	0.000013
Cardiovascular Disease,Organismal Injury and Abn	Atherosclerosis	0.0000135
Cardiovascular Disease,Hereditary Disorder,Organ	Familial vascular disease	0.0000148
Cardiovascular Disease,Organismal Injury and Abn	Occlusion of artery	0.0000191
Cardiovascular Disease,Organismal Injury and Abn	Non-rheumatic aortic stenosis	0.0000193
Cardiovascular Disease,Organismal Injury and Abn	Peripheral vascular disease	0.0000269
Cardiovascular Disease,Tissue Morphology	Regression of blood vessel	0.0000275
Cardiovascular Disease,Organismal Injury and Abn	Failure of heart	0.0000371
Cardiovascular Disease,Organismal Injury and Abn	Myocardial infarction	0.0000443
Cardiovascular Disease,Organismal Injury and Abn	Valvulopathy	0.0000485
Cardiovascular Disease,Cardiovascular System De	Abnormal morphology of heart	0.0000498

ICs from miR-217KI apoE-/- (KI) or Control apoE-/- (wt) mice (p<0,05; LogFC >1<-1). P-values were correcte

B-H p-value	Activation z-score	Molecules
1.96E-08		ACTA2,BMP2,CLEC1B,CLU,COL15A1,COL3A1,COL5A1,CYP2E1,
3.1E-08		ACTA2,BMP2,CLEC1B,CLU,COL15A1,COL3A1,COL5A1,DLL4,ELN
6.92E-07		ACTA2,ACTG2,ADAMTS9,ADGRG1,APLNR,BGN,BMP2,CCN3,CL
0.0000037	-0.13	ACTA2,COL1A1,COL3A1,COL5A1,DDR1,ELN,FLT1,IGF1,IL1RL1,N
0.00000919		ACTA2,BMP2,COL3A1,COL5A1,DLL4,ELN,FLT1,GATA4,MFAP5,M
0.0000169		ACTA2,COL3A1,COL5A1,ELN,GATA4,MFAP5,MGP,TNFRSF11B,V
0.0000237	0.142	ACTA2,C1QTNF1,CAMK2A,CLU,COL3A1,FLT1,FOS,GATA4,HPGI
0.0000292	1.308	ACTG2,APLNR,CYP2E1,DCHS1,DDR1,DIO2,ELN,F8,FIBIN,FLT1,F
0.0000406	0	ACTA2,COL1A1,COL3A1,COL5A1,ELN,GATA4,MFAP5,MMP9,NO
0.0000437		ACTA2,BGN,COL1A1,COL3A1,COL5A1,ELN,GATA4,MFAP5
0.0000451		ACTA2,BGN,COL1A1,COL3A1,COL5A1,MFAP5
0.0000462	0.943	CCN3,CLEC1B,GJA4,GJA5,LIF,NOS3,STAB2
0.000128		ACTA2,COL1A1,COL3A1,COL5A1,ELN,MFAP5,MMP9,NOS3,VWF
0.000134		ACTA2,COL1A1,COL3A1,COL5A1,ELN,MFAP5,MGP,MMP9,NOS3
0.000158	-0.113	ACTA2,CLU,CYP26B1,DDR1,ELN,FLT1,FOS,GREM1,IGF1,IL1RL1
0.000171		ACTA2,BGN,COL1A1,COL1A2,COL3A1,COL5A1,DCHS1,DES,ELN
0.000174		DDR1,IGF1,IL1RL1,MMP9,NOS3,PAPPA,PTX3,SELE,VEGFA
0.000222		ACTA2,BGN,COL1A1,COL3A1,COL5A1,MFAP5,NOS3
0.000252	-0.218	ACTA2,CCN3,CLU,CYP26B1,DDR1,ELN,F8,FLT1,FOS,GREM1,IG
0.000318	-0.218	ACTA2,CCN3,CLU,CYP26B1,DDR1,ELN,F8,FLT1,FOS,GREM1,IG
0.000333	0.762	FOXJ1,GATA4,GJA5,VEGFA
0.000343	-0.137	ACTA2,CLU,CYP26B1,DDR1,ELN,FLT1,FOS,GREM1,IGF1,IL1RL1
0.000372		ACTA2,BGN,COL1A1,COL3A1,COL5A1,ELN,GATA4,HTRA1,IGF1,
0.000456	0.194	ACTA2,CLU,CYP26B1,DDR1,ELN,F8,FLT1,FOS,GREM1,IGF1,IL1I
0.000457		FLT1,MMP9,NOS3,SELE
0.000605	0.447	ACTA2,ARID5A,CEMIP,CLU,COL1A1,COL1A2,FLT1,Gm21596/Hm
0.000612		DLL4,ENPP2,PDGFRB,VEGFA
0.000785	0.816	CDS1,DES,GATA4,IGF1,IL1RL1,JPH2,KCNJ2,KRT18,KRT8,MMP9
0.00092		ACTA2,C1QTNF1,CLU,COL3A1,FLT1,KCNJ2,KRT18,KRT8,MMP9
0.000991	0.762	ADAMTS9,DCHS1,ELN,FLT1,GATA4,GJA5,MGP,MMP9,NOS3,SE
0.001		ACTG2,ADAMTS9,ADGRG1,APLNR,BGN,CCN3,CLU,COL3A1,DA

for multiple testing using the Benjamini-Hochberg (B-H) false discovery rate.

Molecules
28
24
46
20
14
9
24
35
10
8
6
7
9
10
25
26
9
7
27
27
4
24
16
26
4
24
4
17
15
12
33

Table S1F. IPA "Organism Survival" analysis from RNAseq Gene expression in MLECs from miR-21

Categories	Diseases or Functions Ann	p-value	B-H p-value	Predicted Ac
Organismal Survival	Morbidity or mortality	1.07E-16	1.31E-13	Increased
Organismal Survival	Organismal death	1.07E-16	1.31E-13	Increased
Organismal Survival	Perinatal death	3.40E-07	1.52E-05	Increased
Organismal Survival	Neonatal death	5.46E-07	2.30E-05	Increased
Organismal Survival	Survival of organism	2.39E-05	5.54E-04	Decreased

7KI apoE-/- (KI) or Control apoE-/- (wt) mice (p<0,05; LogFC >1<-1). P-values were corrected for multiple testing

Activation z-score	Molecules	# Molecules
6.582	ACTA2,ADAMTS9,ADGRG1,ADNP,ALDH1A3,APLNR,APLP1,AREG,A	117
6.655	ACTA2,ADAMTS9,ADGRG1,ADNP,ALDH1A3,APLNR,APLP1,AREG,A	116
4.445	ALDH1A3,APLP1,BGN,CLEC1B,CRLF1,CYP26B1,DACT1,DCHS1,E2F	32
3.771	ALDH1A3,CLEC1B,CRLF1,CYP26B1,DACT1,FOS,FOXF2,GATA4,GFI	26
-2.083	ACTG2,AREG,BGN,CCL21,CCN3,COL3A1,CXCR2,DACT1,DIO2,DOK	35

using the Benjamini-Hochberg (B-H) false discovery rate.

Table S1G.TargetScan7 Mouse miR-217 target prediction of genes downregulated in MLECs from miR-217

Target gene	Representative transcript	Gene name	3P-seq tags	Conserved si
Zfp354b	ENSMUST00000109124.4	zinc finger protein 354B	25	0
Eln	ENSMUST00000015138.9	elastin	885	1
Glcci1	ENSMUST00000064285.9	glucocorticoid induced transcript 1	423	0
Tpm3-rs7	ENSMUST00000072359.6	tropomyosin 3, related sequence 7	9	0
Spon1	ENSMUST00000046687.10	spondin 1, (f-spondin) extracellula	104	1
Pcsk5	ENSMUST00000050715.8	proprotein convertase subtilisin/ke	74	0
Sema3g	ENSMUST00000090180.2	sema domain, immunoglobulin do	632	0
Camk2a	ENSMUST00000102888.4	calcium/calmodulin-dependent pro	1793	1
Col5a3	ENSMUST00000004201.7	collagen, type V, alpha 3	1478	0
St8sia2	ENSMUST00000026896.4	ST8 alpha-N-acetyl-neuraminide a	7	0
Dok2	ENSMUST00000022698.7	docking protein 2	79	0
Dkk3	ENSMUST00000033036.5	dickkopf homolog 3 (Xenopus laev	3032	0
Foxf2	ENSMUST00000042054.2	forkhead box F2	125	0
AI661453	ENSMUST00000150819.2	expressed sequence AI661453	808	0
Vwa1	ENSMUST00000042196.3	von Willebrand factor A domain co	433	0
Fmo2	ENSMUST00000045902.7	flavin containing monooxygenase	1591	0
Mcf2l	ENSMUST00000173099.2	mcf.2 transforming sequence-like	30	0
Kcnj2	ENSMUST00000042970.2	potassium inwardly-rectifying char	89	0
Lpar1	ENSMUST00000055018.5	lysophosphatidic acid receptor 1	1273	0
Htra3	ENSMUST00000087629.4	HtrA serine peptidase 3	4974	0
Ncmap	ENSMUST00000105858.2	noncompact myelin associated pro	24	0
Cyp26b1	ENSMUST00000168003.3	cytochrome P450, family 26, subfa	272	0
Jam2	ENSMUST00000114195.2	junction adhesion molecule 2	1676	0
Htra1	ENSMUST00000006367.7	HtrA serine peptidase 1	279	0
Fjx1	ENSMUST00000099678.4	four jointed box 1 (Drosophila)	310	0
Mgp	ENSMUST00000032342.1	matrix Gla protein	662	0
Mfap5	ENSMUST00000121656.1	microfibrillar associated protein 5	724	0
E2f2	ENSMUST00000061721.5	E2F transcription factor 2	59	0
Ephb2	ENSMUST00000105845.3	Eph receptor B2	97	0
Tmem59l	ENSMUST00000045286.7	transmembrane protein 59-like	11	0
Dpep2	ENSMUST00000117555.2	dipeptidase 2	12	0
Ildr2	ENSMUST00000111416.1	immunoglobulin-like domain conta	474	0
Gm2026	ENSMUST00000174416.2	predicted gene 2026	5	0
Chac1	ENSMUST00000028780.3	ChaC, cation transport regulator 1	3666	0
Rasl12	ENSMUST00000085453.4	RAS-like, family 12	247	0
Sox9	ENSMUST00000000579.2	SRY (sex determining region Y)-b	647	0
Ppfibp2	ENSMUST00000040056.8	PTPRF interacting protein, binding	129	0
Ltbp2	ENSMUST00000002073.7	latent transforming growth factor b	28	0
Acta2	ENSMUST00000039631.8	actin, alpha 2, smooth muscle, ao	14588	0
Itgb5	ENSMUST00000115028.4	integrin beta 5	2018	0
Dio2	ENSMUST00000082432.3	deiodinase, iodothyronine, type II	24	0
Foxa1	ENSMUST00000044380.6	forkhead box A1	116	0
Tnfrsf9	ENSMUST00000105672.4	tumor necrosis factor receptor sup	24	0
Lif	ENSMUST00000066283.6	leukemia inhibitory factor	146	0
Mmp15	ENSMUST00000034243.5	matrix metallopeptidase 15	499	0
Sema3c	ENSMUST00000030568.8	sema domain, immunoglobulin do	1516	0
Slc43a1	ENSMUST00000111625.1	solute carrier family 43, member 1	70	0
Ngf	ENSMUST00000106925.3	nerve growth factor	1496	0
Tmem252	ENSMUST00000057243.4	transmembrane protein 252	477	0
Ctse	ENSMUST00000073350.7	cathepsin E	181	0
St14	ENSMUST00000034478.2	suppression of tumorigenicity 14 (	62	0
Grem1	ENSMUST00000099575.3	gremlin 1	30	0
Bach2	ENSMUST00000171600.1	BTB and CNC homology 2	72	1
Kcnmb1	ENSMUST00000020362.2	potassium large conductance calc	26	0
Fam83h	ENSMUST00000060807.6	family with sequence similarity 83,	74	0

Nostrin	ENSMUST00000041865.7	nitric oxide synthase trafficker	221	0
Abhd11	ENSMUST00000046999.8	abhydrolase domain containing 11	1025	0

'KI apoE-/- (KI) mice.

Conserved 8ı	Conserved 7ı	Conserved 7π	Poorly conserved sites total	Poorly conserved 8mer
0	0	0	1	0
1	0	0	0	0
0	0	0	1	0
0	0	0	1	0
1	0	0	0	0
0	0	0	1	0
0	0	0	1	0
1	0	0	0	0
0	0	0	1	1
0	0	0	2	0
0	0	0	1	0
0	0	0	2	0
0	0	0	1	0
0	0	0	1	0
0	0	0	2	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	1
0	0	0	1	1
0	0	0	1	0
0	0	0	1	1
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	2	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	2	0
0	0	0	2	0
0	0	0	1	1
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	2	1
0	0	0	1	0
0	0	0	1	0
0	0	0	1	0
0	0	0	1	1
0	0	0	1	0
0	0	0	1	0
0	0	0	1	1
0	0	0	1	1
0	0	0	1	0
0	0	0	2	0
0	0	0	1	1
0	0	0	2	0
0	0	0	1	1
1	0	0	1	0
0	0	0	1	0
0	0	0	1	0

0	0	0	1	0
0	0	0	1	0

Poorly conserved 7mer-m	Poorly conserved 7mer	6mer sites	miRNA	Cumulative wei
1	0	1	mmu-miR-217-5p	-0.02
0	0	0	mmu-miR-217-5p	-0.21
0	1	1	mmu-miR-217-5p	-0.13
1	0	1	mmu-miR-217-5p	-0.19
0	0	0	mmu-miR-217-5p	-0.04
1	0	0	mmu-miR-217-5p	-0.04
0	1	0	mmu-miR-217-5p	0
0	0	0	mmu-miR-217-5p	-0.35
0	0	0	mmu-miR-217-5p	-0.15
2	0	4	mmu-miR-217-5p	-0.2
0	1	0	mmu-miR-217-5p	0
1	1	4	mmu-miR-217-5p	-0.22
0	1	1	mmu-miR-217-5p	-0.06
0	1	1	mmu-miR-217-5p	0
1	1	1	mmu-miR-217-5p	-0.14
1	0	0	mmu-miR-217-5p	-0.11
0	1	0	mmu-miR-217-5p	-0.01
0	0	1	mmu-miR-217-5p	-0.22
0	0	0	mmu-miR-217-5p	-0.17
1	0	0	mmu-miR-217-5p	-0.12
0	0	0	mmu-miR-217-5p	-0.34
0	1	0	mmu-miR-217-5p	-0.01
0	1	2	mmu-miR-217-5p	-0.09
1	0	0	mmu-miR-217-5p	-0.22
1	0	0	mmu-miR-217-5p	-0.07
0	1	0	mmu-miR-217-5p	-0.21
1	1	0	mmu-miR-217-5p	0
1	0	2	mmu-miR-217-5p	-0.11
0	1	3	mmu-miR-217-5p	0
0	1	0	mmu-miR-217-5p	-0.04
0	1	0	mmu-miR-217-5p	-0.01
0	2	0	mmu-miR-217-5p	-0.02
1	1	1	mmu-miR-217-5p	0
0	0	1	mmu-miR-217-5p	-0.45
0	1	1	mmu-miR-217-5p	-0.04
1	0	0	mmu-miR-217-5p	-0.04
1	0	0	mmu-miR-217-5p	-0.28
1	0	1	mmu-miR-217-5p	-0.01
1	0	0	mmu-miR-217-5p	0
0	1	0	mmu-miR-217-5p	0
1	0	1	mmu-miR-217-5p	-0.09
1	0	2	mmu-miR-217-5p	-0.11
0	0	0	mmu-miR-217-5p	-0.21
1	0	1	mmu-miR-217-5p	-0.13
1	0	4	mmu-miR-217-5p	0
0	0	0	mmu-miR-217-5p	-0.18
0	0	0	mmu-miR-217-5p	0
1	0	1	mmu-miR-217-5p	0
0	2	0	mmu-miR-217-5p	-0.01
0	0	0	mmu-miR-217-5p	0
0	2	1	mmu-miR-217-5p	0
0	0	0	mmu-miR-217-5p	-0.26
0	1	0	mmu-miR-217-5p	-0.06
1	0	1	mmu-miR-217-5p	-0.13
0	1	0	mmu-miR-217-5p	-0.07

1	0	0	mmu-miR-217-5p	-0.24
0	1	0	mmu-miR-217-5p	0

Total context	Aggregate P(	Previous Tar(	logFC	pval
-0.05	< 0.1		-4.30	0.00
-0.21	0.29	2007, 2009, 2	-3.07	0.01
-0.14	0.26	2007, 2009, 2	-2.93	0.00
-0.19	< 0.1		-2.92	0.04
-0.33	0.31	2011	-2.58	0.02
-0.06	< 0.1	2011	-1.98	0.00
-0.01	< 0.1		-1.95	0.00
-0.37	0.37	2005, 2007, 2	-1.93	0.01
-0.15	< 0.1	2005, 2007, 2	-1.91	0.01
-0.24	< 0.1	2005, 2007, 2	-1.89	0.02
-0.06	< 0.1		-1.87	0.02
-0.22	< 0.1	2005, 2007, 2	-1.87	0.03
-0.11	< 0.1		-1.79	0.02
-0.01	< 0.1		-1.73	0.02
-0.17	< 0.1	2005, 2007, 2	-1.67	0.01
-0.11	< 0.1	2005, 2007, 2	-1.66	0.01
-0.01	< 0.1	2009, 2011	-1.60	0.02
-0.22	< 0.1	2007, 2009, 2	-1.58	0.00
-0.18	< 0.1	2007, 2009, 2	-1.56	0.05
-0.12	< 0.1	2007, 2009, 2	-1.56	0.03
-0.34	< 0.1	2007, 2009, 2	-1.52	0.04
-0.01	< 0.1	2005, 2007, 2	-1.48	0.01
-0.13	< 0.1	2011	-1.47	0.00
-0.22	< 0.1	2005, 2007, 2	-1.47	0.01
-0.07	< 0.1	2005, 2007, 2	-1.46	0.04
-0.21	0.26	2005, 2007, 2	-1.46	0.03
-0.23	< 0.1	2005, 2007, 2	-1.44	0.01
-0.12	< 0.1	2005, 2007, 2	-1.42	0.02
-0.01	< 0.1		-1.40	0.03
-0.08	< 0.1		-1.38	0.04
-0.01	< 0.1		-1.38	0.02
-0.02	< 0.1	2007, 2011	-1.38	0.00
-0.1	< 0.1	2011	-1.37	0.02
-0.45	< 0.1	2007, 2009, 2	-1.36	0.01
-0.04	< 0.1	2005, 2007, 2	-1.31	0.04
-0.04	< 0.1	2005, 2007, 2	-1.30	0.03
-0.28	< 0.1	2005, 2007, 2	-1.28	0.01
-0.07	< 0.1	2005, 2007	-1.26	0.01
-0.57	< 0.1		-1.25	0.03
-0.07	< 0.1		-1.23	0.01
-0.09	< 0.1	2005, 2007, 2	-1.17	0.03
-0.21	< 0.1		-1.17	0.04
-0.36	< 0.1	2005, 2007, 2	-1.16	0.02
-0.13	< 0.1	2005, 2007, 2	-1.15	0.01
-0.02	< 0.1		-1.15	0.00
-0.2	< 0.1	2005, 2007, 2	-1.11	0.01
-0.03	< 0.1		-1.10	0.04
-0.04	< 0.1		-1.09	0.02
-0.16	< 0.1		-1.08	0.02
-0.44	< 0.1		-1.08	0.02
-0.02	< 0.1		-1.06	0.01
-0.26	< 0.1	2005, 2007	-1.06	0.03
-0.07	0.5	2005, 2007, 2	-1.05	0.03
-0.17	< 0.1	2005, 2009, 2	-1.02	0.02
-0.08	< 0.1	2007, 2009, 2	-1.02	0.05

-0.24 < 0.1	2009, 2011	-1.01	0.03
-0.01 < 0.1		-1.00	0.01

Table S1H. Genes downregulated in MLECs from miR-217KI apoE-/- (KI) mice and whose expression

Uptream Regulator	miR217 Conserve	GeneID	LogFC.KIvsWT
DKK1	1	ACTA2	-1.25
DKK1	1	COL1A1	-1.68
DKK1	1	EPHB2	-1.40
DKK1	1	KRT18	-1.05
DKK1	1	MMP9	-1.97
DKK1	1	SOX9	-1.30
DKK1	1	TAGLN	-1.13
DKK1	1	TBX3	-1.59
DKK1	1	WNT11	-1.55
KRAS	2	AREG	-1.21
KRAS	2	BGN	-1.09
KRAS	2	CLU	-1.58
KRAS	2	COL1A1	-1.68
KRAS	2	COL3A1	-1.69
KRAS	2	ELN	-3.07
KRAS	2	FGF7	-1.09
KRAS	2	FOS	-1.30
KRAS	2	GGT1	-2.91
KRAS	2	KCNN4	-3.35
KRAS	2	LAMA2	-1.57
KRAS	2	LAMA5	-1.25
KRAS	2	LIF	-1.15
KRAS	2	MCAM	-1.05
KRAS	2	MMP9	-1.97
KRAS	2	MSLN	-1.69
KRAS	2	P2RY14	-1.14
KRAS	2	S100A14	-1.01
KRAS	2	S100A4	1.48
KRAS	2	SOD3	-1.62
KRAS	2	SOX9	-1.30
KRAS	2	TNFRSF11B	-1.35
KRAS	2	VEGFA	-1.03
PPARGC1A	1	ADGRG1	-1.07
PPARGC1A	1	COL1A2	-1.62
PPARGC1A	1	COL6A3	-1.23
PPARGC1A	1	DIO2	-1.17
PPARGC1A	1	FIBIN	-1.99
PPARGC1A	1	IGFBP3	-1.24
PPARGC1A	1	IGFBP5	-1.88
PPARGC1A	1	LAMA2	-1.57
PPARGC1A	1	MFAP5	-1.44
PPARGC1A	1	MMP15	-1.15
PPARGC1A	1	PCSK5	-1.98
PPARGC1A	1	SEMA3C	-1.11
PPARGC1A	1	SEMA3G	-1.95
PPARGC1A	1	SPARCL1	-1.50
PPARGC1A	1	TNFRSF11B	-1.35
PPARGC1A	1	VEGFA	-1.03
RUNX2	1	ACTA2	-1.25
RUNX2	1	BMP2	-1.72
RUNX2	1	COL1A1	-1.68
RUNX2	1	COL1A2	-1.62

RUNX2	1	HTRA1	-1.47
RUNX2	1	SOX9	-1.30
RUNX2	1	TAGLN	-1.13
RUNX2	1	TNFRSF11B	-1.35
RUNX2	1	VEGFA	-1.03
PURB	2	ACTA2	-1.25
PURB	2	HTRA1	-1.47
PTEN	1	BCL3	-1.18
PTEN	1	FGF7	-1.09
PTEN	1	FLT1	-1.07
PTEN	1	FOS	-1.30
PTEN	1	GGT1	-2.91
PTEN	1	GJA5	-1.78
PTEN	1	GPR4	-1.32
PTEN	1	IGF1	-1.01
PTEN	1	IGFBP3	-1.24
PTEN	1	IGFBP5	-1.88
PTEN	1	KRT19	-1.31
PTEN	1	MCAM	-1.05
PTEN	1	MMP9	-1.97
PTEN	1	NTS	-1.32
PTEN	1	P2RY14	-1.14
PTEN	1	PAPPA	-1.25
PTEN	1	PDGFRB	-1.34
PTEN	1	PSCA	-1.79
PTEN	1	TNFRSF11B	-1.35
PTEN	1	TNFRSF9	-1.16
PTEN	1	VEGFA	-1.03
ROCK1	1	COL1A1	-1.68
ROCK1	1	COL3A1	-1.69
ROCK1	1	COL5A1	-1.34
ROCK1	1	LAMA2	-1.57
FN1	1	ACTA2	-1.25
FN1	1	COL1A1	-1.68
FN1	1	FOS	-1.30
FN1	1	GJB3	-1.41
FN1	1	ITGA4	1.18
FN1	1	KRT7	-1.37
FN1	1	MGP	-1.46
FN1	1	MMP9	-1.97
FN1	1	SOX9	-1.30
FN1	1	TAGLN	-1.13
FOXO4	1	ENPEP	-1.10
FOXO4	1	MMP9	-1.97
FOXO4	1	S1PR3	-1.17
FOXO4	1	SOX9	-1.30
FOXO4	1	VEGFA	-1.03
ACTG1	1	ACTA2	-1.25
ACTG1	1	TAGLN	-1.13
CAMK2A	1	CAMK2A	-1.93
CAMK2A	1	FOS	-1.30
ACVR2A	1	SELE	1.09
MAPK1	1	COL7A1	-1.71
MAPK1	1	FOS	-1.30
MAPK1	1	IL1RL1	-1.32

MAPK1	1	LIF	-1.15
MAPK1	1	MMP9	-1.97
MAPK1	1	NPTX2	-3.72
MAPK1	1	NUPR1	-1.11
MAPK1	1	PSMB8	-1.40
MAPK1	1	PSMB9	-1.76
MAPK1	1	S1PR3	-1.17
MAPK1	1	TNFRSF9	-1.16
ETV6	1	DLL4	-1.27
ETV6	1	VEGFA	-1.03
IL6ST	1	ENPP2	1.31
IL6ST	1	SPRR1A	-1.90
CHST11	2	MMP9	-1.97
RBM39	1	HTRA1	-1.47
SUZ12	1	FOXA1	-1.17
SUZ12	1	GATA4	2.76
SUZ12	1	IGFBP3	-1.24
SUZ12	1	JAM2	-1.47
SUZ12	1	TBX3	-1.59
SUZ12	1	TNFRSF11B	-1.35
HNRNPA2B1	1	CEMIP	-1.38
HNRNPA2B1	1	DDR1	-1.13
HNRNPA2B1	1	LPAR1	-1.56
HNRNPA2B1	1	NTS	-1.32
HNRNPA2B1	1	PAPPA	-1.25
HNRNPA2B1	1	S1PR3	-1.17
ADCYAP1	1	COL3A1	-1.69
ADCYAP1	1	COL5A1	-1.34
ADCYAP1	1	ENPP2	1.31
ADCYAP1	1	FOS	-1.30
ADCYAP1	1	KCNN4	-3.35
ADCYAP1	1	KRT8	-1.15
ADCYAP1	1	MCAM	-1.05
PAX3	1	CLU	-1.58
PAX3	1	COL1A2	-1.62
PAX3	1	MCAM	-1.05
PAX3	1	MGP	-1.46
PAX3	1	MMP9	-1.97
PAX3	1	SFN	-1.22
PAX3	1	ST8SIA2	-1.89
AZIN1	1	ACTA2	-1.25
NR4A2	1	AREG	-1.21
NR4A2	1	COL1A1	-1.68
NR4A2	1	MMP9	-1.97
NR4A2	1	PTX3	1.23
SIRT1	1	FGF7	-1.09
SIRT1	1	GATA4	2.76
SIRT1	1	IGF1	-1.01
SIRT1	1	LAMA2	-1.57
SIRT1	1	LTBP2	-1.26
SIRT1	1	MMP9	-1.97
SIRT1	1	NOS3	-1.15
SIRT1	1	PSMB9	-1.76
SIRT1	1	SOD3	-1.62
RIMS2	1	IGF1	-1.01

Table S1H.miR-217 Conserved.sites.total: number of miR-217 binding sequences in the 3'UTR of the u

is regulated through a miR-217 direct target gene.

uptream regulator gene identified by TargetScan; logFC.KIvsWT_GeneID: logFC of gene regulated by the upstram

regulator miR-217 direct target gene.

Table S1I. Genes from eNOS signaling pathway downregulated in MLECs from miR-217KI apoE-/- (KI) mice anc

Uptream Reg	miR217 Cons	GeneID	LogFC.KIvsW	Ingenuity Canonical Pathways	General pathway
DKK1	1	ACTA2	-1.25	VEGF Signaling	eNOS signaling
RUNX2	1	ACTA2	-1.25	VEGF Signaling	eNOS signaling
PURB	2	ACTA2	-1.25	VEGF Signaling	eNOS signaling
FN1	1	ACTA2	-1.25	VEGF Signaling	eNOS signaling
ACTG1	1	ACTA2	-1.25	VEGF Signaling	eNOS signaling
AZIN1	1	ACTA2	-1.25	VEGF Signaling	eNOS signaling
DKK1	1	COL1A1	-1.68	Apelin Liver Signaling Pathway	eNOS signaling
KRAS	2	COL1A1	-1.68	Apelin Liver Signaling Pathway	eNOS signaling
RUNX2	1	COL1A1	-1.68	Apelin Liver Signaling Pathway	eNOS signaling
ROCK1	1	COL1A1	-1.68	Apelin Liver Signaling Pathway	eNOS signaling
FN1	1	COL1A1	-1.68	Apelin Liver Signaling Pathway	eNOS signaling
NR4A2	1	COL1A1	-1.68	Apelin Liver Signaling Pathway	eNOS signaling
PPARGC1A	1	COL1A2	-1.62	Apelin Liver Signaling Pathway	eNOS signaling
RUNX2	1	COL1A2	-1.62	Apelin Liver Signaling Pathway	eNOS signaling
PAX3	1	COL1A2	-1.62	Apelin Liver Signaling Pathway	eNOS signaling
KRAS	2	COL3A1	-1.69	Apelin Liver Signaling Pathway	eNOS signaling
ROCK1	1	COL3A1	-1.69	Apelin Liver Signaling Pathway	eNOS signaling
ADCYAP1	1	COL3A1	-1.69	Apelin Liver Signaling Pathway	eNOS signaling
ROCK1	1	COL5A1	-1.34	Apelin Liver Signaling Pathway	eNOS signaling
ADCYAP1	1	COL5A1	-1.34	Apelin Liver Signaling Pathway	eNOS signaling
PTEN	1	FLT1	-1.07	VEGF Signaling	eNOS signaling
CAMK2A	1	FOS	-1.30	cAMP-mediated signaling	eNOS signaling
HNRNPA2B1	1	LPAR1	-1.56	Gαi /LPA Signaling	eNOS signaling
SIRT1	1	NOS3	-1.15	eNOS signaling	eNOS signaling
KRAS	2	P2RY14	-1.14	Gαi /LPA Signaling	eNOS signaling
PTEN	1	P2RY14	-1.14	Gαi /LPA Signaling	eNOS signaling
PTEN	1	PDGFRB	-1.34	Apelin Liver Signaling Pathway	eNOS signaling
FOXO4	1	S1PR3	-1.17	Gαi /LPA Signaling	eNOS signaling
MAPK1	1	S1PR3	-1.17	Gαi /LPA Signaling	eNOS signaling
HNRNPA2B1	1	S1PR3	-1.17	Gαi /LPA Signaling	eNOS signaling
PAX3	1	SFN	-1.22	VEGF Signaling	eNOS signaling
KRAS	2	VEGFA	-1.03	VEGF Signaling	eNOS signaling
PPARGC1A	1	VEGFA	-1.03	VEGF Signaling	eNOS signaling
RUNX2	1	VEGFA	-1.03	VEGF Signaling	eNOS signaling
PTEN	1	VEGFA	-1.03	VEGF Signaling	eNOS signaling
FOXO4	1	VEGFA	-1.03	VEGF Signaling	eNOS signaling
ETV6	1	VEGFA	-1.03	VEGF Signaling	eNOS signaling

Table S1I.miR-217 Conserved.sites.total: number of miR-217 binding sequences in the 3'UTR of the uptream reg

l whose expression is regulated through a miR-217 direct target gene.

ulator gene identified by TargetScan; logFC.KIvsWT_GeneID: logFC of gene regulated by the upstram regulator r

ɲiR-217 direct target gene.