Supplementary table S.2 Cufflinks output, list of differentially expressed genes in head kidney tissue of three-spined sticklebacks. Differentially expressed is defined by comparison to uninfected controls. The term „gene“ is the name for a specific gene as taken from the *G. aculeatus* reference genome, „locus“ is the location on the genome, „sample_1“ is the control group, „sample_2“ is the infection treatment group, „value_1“ are FPKM values for „sample_1“, „value_2“ FPKM values for „sample_2“, log2(fold change) displays the transformed fold change in „sample_2“ compared to „sample_1“, the next three columns show the test statistic, p value and q value for each test, the last column shows whether the observed difference was significant (only significant differences shown).

gene	locus	sample_1	sample_2	value_1	value_2	log2(fold_change)	test_stat	p_value	q_value	significant
SMTNL2	groupI:1260570-1274267	control	clone XII	2,23133	26,5148	3,57082	-3,11312	0,00185121	0,0252328	yes
SCARF1	groupI:7557007-7561871	control	clone XII	1,35193	15,7684	3,54394	-3,38856	0,000702598	0,0115278	yes
SLC13A2 (1 of 2)	groupI:7578221-7584388	control	clone XII	1,19994	25,2882	4,39743	-4,48148	7,41E-06	0,000257352	yes
BLVRB	groupI:16058123-16061240	control	clone XII	163,801	78,309	-1,06469	2,98868	0,00280186	0,0350824	yes
ENSGACG00000014752	groupI:22723989-22724814	control	clone XII	73,7738	6,65285	-3,47107	3,23053	0,00123559	0,0182374	yes
ACADL	groupI:22725531-22729041	control	clone XII	8,51763	31,892	1,90467	-6,06688	1,30E-09	1,49E-07	yes
SLC1A5	groupI:9146858-9153860	control	clone XII	9,29285	105,952	3,51114	-3,97155	7,14E-05	0,00173578	yes
ENSGACG00000012245	groupI:15150060-15151052	control	clone XII	3,6098	32,9034	3,18824	-2,86121	0,00422023	0,0484099	yes
ADPRHL1	groupII:7768909-7772963	control	clone XII	0,339998	13,3579	5,29602	-3,69892	0,000216518	0,00437762	yes
RRAD	groupII:8210016-8212357	control	clone XII	2,13092	28,0373	3,7178	-3,26541	0,00109305	0,0165155	yes
ENSGACG00000016298	groupII:14551247-14569051	control	clone XII	21,2148	135,673	2,67699	-4,32536	1,52E-05	0,000473464	yes
ALPK3 (1 of 2)	groupII:15268483-15277781	control	clone XII	0,155975	5,1052	5,03258	-3,12774	0,00176154	0,0242358	yes
ENSGACG00000016813	groupII:18474082-18485088	control	clone XII	3,60304	16,2603	2,17407	-4,51455	6,35E-06	0,000225556	yes
CSRP3	groupII:19781207-19783294	control	clone XII	0,554312	55,6374	6,64921	-3,30396	0,000953306	0,014776	yes
ENSGACG00000012663	groupIII:205052-212076	control	clone XII	0,272941	4,93179	4,17545	-3,02619	0,00247655	0,0318205	yes
ENSGACG00000014960	groupIII:6336030-6349511	control	clone XII	0,194248	44,1495	7,82835	-4,27933	1,87E-05	0,000565075	yes
ENSGACG00000015175	groupIII:7098657-7106144	control	clone XII	5,7217	35,6068	2,63764	-2,89985	0,00373337	0,0440022	yes
PIP5K1C (2 of 2)	groupIII:7710662-7721459	control	clone XII	0,832627	12,8216	3,94477	-3,63847	0,000274262	0,00532287	yes
FAM102B (2 of 2)	groupIII:7039318-7046081	control	clone XII	0,911866	9,14046	3,32537	-2,93647	0,00331975	0,0401188	yes
MYLK4 (2 of 2)	groupIII:10620516-10623791	control	clone XII	1,90815	25,9336	3,76457	-3,29732	0,000976123	0,015064	yes
OBSCN	groupIII:14055165-14092796	control	clone XII	0,908085	7,90793	3,1224	-3,65116	0,000261055	0,00511107	yes
FOSL1	groupIV:5471462-5474199	control	clone XII	0,765935	69,9279	6,5125	-4,90227	9,47E-07	4,47E-05	yes
ANXA6	groupIV:13375788-13385299	control	clone XII	1,40423	16,8382	3,58389	-3,18398	0,00145263	0,0207619	yes
ACSL4	groupIV:15052252-15058258	control	clone XII	14,7063	41,9467	1,51213	-3,13875	0,00169672	0,0235202	yes
LMOD2 (1 of 2)	groupIV:17997325-18001058	control	clone XII	0,58957	22,5083	5,25465	-2,96852	0,00299241	0,0369881	yes
PFKFB3	groupIV:22147683-22153447	control	clone XII	3,48231	29,3261	3,07407	-3,4272	0,000609832	0,0102663	yes
CCRN4L (1 of 2)	groupIV:27563357-27572709	control	clone XII	5,92166	109,628	4,21047	-3,12173	0,00179793	0,0246392	yes
ENSGACG00000019744	groupIV:29692169-29694681	control	clone XII	1,68518	223,509	7,05129	-3,75056	0,00017644	0,0036912	yes
SEMA3A (2 of 2)	groupIV:29946460-29961696	control	clone XII	2,02944	29,2115	3,84738	-3,83644	0,000124828	0,0027673	yes
SLC25A43	groupIV:5559504-5568467	control	clone XII	52,8035	212,185	2,00662	-6,09712	1,08E-09	1,26E-07	yes
FHL1 (1 of 2)	groupIV:6211431-6220387	control	clone XII	10,6395	57,383	2,4312	-2,84998	0,00437216	0,0497423	yes
ENSGACG00000018662	groupIV:16111937-16112913	control	clone XII	2,14062	87,7155	5,35673	-4,59853	4,25E-06	0,000160752	yes
JUNB (2 of 2)	groupIX:15395448-15396453	control	clone XII	4,48677	102,8	4,51802	-4,28228	1,85E-05	0,000558641	yes
SLC8A1 (2 of 2)	groupIX:19919460-19931018	control	clone XII	0,248414	32,5848	7,03531	-3,06588	0,00217029	0,0286471	yes
SORBS2	groupIX:5510578-5528882	control	clone XII	0,981881	16,2959	4,05282	-3,23803	0,00120357	0,0178536	yes
SMOX	groupIX:8508224-8518163	control	clone XII	10,698	600,384	5,81048	-4,69952	2,61E-06	0,00010597	yes
MYOZ2 (1 of 2)	groupIX:8678716-8682685	control	clone XII	1,47506	47,9981	5,02413	-3,91583	9,01E-05	0,00210714	yes
DDIT4 (1 of 2)	groupV:834468-835775	control	clone XII	21,1832	742,085	5,13059	-4,64179	3,45E-06	0,000134727	yes
MYBPC2 (1 of 2)	groupV:10018871-10040862	control	clone XII	8,76993	0,757086	-3,53404	3,79472	0,00014781	0,00318601	yes
UROS	groupV:1387477-1389630	control	clone XII	51,0921	22,2045	-1,20225	3,0864	0,00202598	0,0271208	yes
SYNPO2L (2 of 2)	groupV:2058537-2067911	control	clone XII	0,190437	14,5262	6,2532	-3,81684	0,000135171	0,00295699	yes
SOCS3 (2 of 2)	groupV:2198432-2199203	control	clone XII	6,09284	140,181	4,52403	-3,96145	7,45E-05	0,00179809	yes
COL1A1 (2 of 2)	groupV:3433394-3454716	control	clone XII	57,8938	25,687	-1,17237	3,97503	7,04E-05	0,00171469	yes
COX6B1 (1 of 2)	groupV:10666447-10667261	control	clone XII	13,5583	216,876	3,99961	-3,02422	0,00249279	0,0319907	yes
ACE	groupV:11674618-11688534	control	clone XII	5,03862	11,7374	1,22001	-3,01643	0,0025577	0,032646	yes
PROM2	groupVI:8443462-8452120	control	clone XII	1,18289	10,2024	3,10851	-3,01901	0,00253599	0,0324275	yes
LDB3	groupVI:15326453-15352359	control	clone XII	0,855691	12,2005	3,8337	-3,15268	0,00161777	0,0226343	yes
BAG3	groupVI:2938723-2942498	control	clone XII	5,35787	79,0231	3,88254	-2,99119	0,00277896	0,0348567	yes
AVPI1	groupVI:9052763-9054969	control	clone XII	7,71055	48,7292	2,65988	-2,89982	0,00373378	0,0440063	yes
ENSGACG00000010126	groupVI:12376810-12424549	control	clone XII	0,044435	4,94232	6,79735	-3,82171	0,000132529	0,00290846	yes
ACTN2	groupVI:12428216-12443132	control	clone XII	0,686077	48,5092	6,14374	-3,71788	0,000200904	0,00411318	yes
HSPB1	groupVII:14587962-14593757	control	clone XII	13,0002	142,385	3,4532	-3,69091	0,000223452	0,00449394	yes
PVRL1 (2 of 2)	groupVII:21614700-21623583	control	clone XII	11,0099	0,538633	-4,35336	2,89607	0,00377867	0,0444195	yes
ENSGACG00000020727	groupVII:23258674-23261239	control	clone XII	2,31207	45,9853	4,31392	-4,50459	6,65E-06	0,000234774	yes
LRCH2	groupVII:22687320-22700908	control	clone XII	4,69888	9,75919	1,05445	-2,85663	0,00428167	0,0489486	yes
IRF4 (2 of 2)	groupVIII:3510443-3515871	control	clone XII	24,12	115,193	2,25575	-3,4215	0,000622756	0,0104458	yes
ENSGACG00000010050	groupVIII:12782195-12784724	control	clone XII	6,09156	75,6528	3,63451	-6,59751	4,18E-11	7,08E-09	yes
GADD45B (1 of 2)	groupVIII:17587366-17588960	control	clone XII	12,5456	57,864	2,20549	-2,88931	0,00386086	0,0451694	yes
IGFBP1 (1 of 2)	groupVIII:3323546-3325070	control	clone XII	6,64213	389,223	5,87281	-3,50006	0,00046516	0,00823314	yes
MYLK4 (1 of 2)	groupVIII:3765987-3770589	control	clone XII	0,69573	43,2216	5,95708	-3,35876	0,000782943	0,0125899	yes
ENSGACG00000005760	groupVIII:5120336-5122462	control	clone XII	12,2208	59,1046	2,27393	-3,918	8,93E-05	0,00209134	yes
PRAM1	groupVIII:9640470-9647257	control	clone XII	69,785	11,736	-2,57198	3,22687	0,00125151	0,0184265	yes
ELTD1	groupVIII:12041724-12054205	control	clone XII	6,45516	40,5094	2,64973	-3,93655	8,27E-05	0,00196096	yes
GZMM (3 of 5)	groupVIII:16529393-16532680	control	clone XII	406,144	56,4309	-2,84743	8,82215	0	0	yes
ENSGACG00000008242	groupX:12654371-12658742	control	clone XII	15,8101	1,72233	-3,19841	3,16156	0,00156927	0,0220915	yes
JUNB (1 of 2)	groupXI:3309436-3310423	control	clone XII	14,9186	106,155	2,83099	-2,86058	0,00422861	0,0484831	yes
ENSGACG00000007447	groupXI:4320058-4324681	control	clone XII	3,75165	9,22147	1,29747	-3,13166	0,00173823	0,0239772	yes
ENSGACG00000008064	groupXI:5057905-5058802	control	clone XII	1,52053	26,8809	4,14393	-3,49378	0,000476233	0,00839255	yes
TCAP	groupXI:6193595-6194777	control	clone XII	2,24873	51,4578	4,51621	-3,95242	7,74E-05	0,00185575	yes
MYLPF (2 of 2)	groupXI:13368252-13371517	control	clone XII	141,621	16,6078	-3,0921	2,9606	0,0030704	0,0377321	yes
ENSGACG00000008053	groupXI:5019934-5020840	control	clone XII	7,88532	75,7903	3,26477	-3,42507	0,000614647	0,0103346	yes
ENSGACG00000008055	groupXI:5020849-5021746	control	clone XII	8,90505	66,6108	2,90306	-3,18056	0,0014699	0,0209609	yes
SOCS3 (1 of 2)	groupXI:9066120-9067557	control	clone XII	8,54547	632,269	6,20923	-5,20341	1,96E-07	1,15E-05	yes
TNNC2 (1 of 2)	groupXII:3692239-3694594	control	clone XII	38,9134	3,60158	-3,43356	3,0813	0,00206096	0,0274915	yes
CA6 (1 of 2)	groupXII:9898691-9902829	control	clone XII	3,44305	103,729	4,91299	-4,85997	1,17E-06	5,37E-05	yes
CA6 (2 of 2)	groupXII:9907407-9923316	control	clone XII	1,36533	41,7585	4,93474	-3,79045	0,000150373	0,00323204	yes
PFKM (1 of 2)	groupXII:10481807-10490116	control	clone XII	4,37929	0,209271	-4,38725	2,98857	0,00280291	0,0350929	yes
TNNT2 (1 of 2)	groupXII:12120259-12127679	control	clone XII	2,03777	371,584	7,51055	-4,0485	5,15E-05	0,00132201	yes
JPH2	groupXII:15320377-15331165	control	clone XII	1,59454	15,9748	3,32459	-3,20714	0,00134064	0,0194701	yes
ENSGACG00000012228	groupXII:16055913-16064592	control	clone XII	1,18329	23,1913	4,29271	-4,20161	2,65E-05	0,000756896	yes
ENSGACG00000012654	groupXII:16665952-16666789	control	clone XII	0,857158	179,67	7,71157	-3,9767	6,99E-05	0,00170479	yes
ENSGACG00000012657	groupXII:16668755-16670927	control	clone XII	3,66469	407,78	6,79796	-3,73619	0,000186833	0,00387162	yes
HSPB7	groupXII:5795326-5797360	control	clone XII	3,66327	152,038	5,37516	-3,46454	0,000531145	0,00917649	yes
PLEKHG5	groupXII:14799330-14819560	control	clone XII	2,53525	10,3397	2,028	-4,59658	4,29E-06	0,000162043	yes
MYL7	groupXIII:1859284-1860683	control	clone XII	5,31357	741,128	7,1239	-3,83892	0,000123576	0,00274436	yes
ENTPD4	groupXIII:11854910-11860754	control	clone XII	10,0272	21,0542	1,07019	-3,40573	0,000659864	0,0109496	yes
ADAMTS13	groupXIII:13880400-13888437	control	clone XII	6,34378	11,0225	0,797039	-5,08923	3,60E-07	1,95E-05	yes
KLF9	groupXIII:11679462-11681419	control	clone XII	11,7021	155,716	3,73408	-3,54391	0,000394239	0,00718671	yes
BMP10 (2 of 2)	groupXIV:6045851-6047708	control	clone XII	0,474013	25,6253	5,7565	-3,29288	0,000991652	0,015258	yes
TPM2	groupXIV:14793584-14812370	control	clone XII	58,3256	24,7439	-1,23705	8,15291	4,44E-16	2,06E-13	yes

ANO1 (1 of 2)	groupXIX:959941-986537	control	clone XII	5,53269	14,7195	1,41167	-3,15892	0,00158354	0,0222503	yes
TJP1 (1 of 2)	groupXIX:7580595-7597632	control	clone XII	2,06437	8,8901	2,10649	-2,93363	0,00335018	0,0404128	yes
TNNI2 (1 of 5)	groupXIX:9287887-9290073	control	clone XII	36,9595	1,71019	-4,43371	3,33945	0,000839432	0,0133171	yes
TNNI2 (3 of 5)	groupXIX:9291924-9297476	control	clone XII	72,7765	3,92816	-4,21155	3,59615	0,00032296	0,00609449	yes
ALPK3 (2 of 2)	groupXIX:12932395-12942731	control	clone XII	0,154534	3,47256	4,49	-3,09719	0,00195363	0,0263343	yes
LRRC10	groupXIX:18032150-18032915	control	clone XII	0,769411	24,6017	4,99886	-3,13908	0,00169482	0,0234988	yes
DENND4A (2 of 2)	groupXIX:6453753-6469506	control	clone XII	2,7655	45,001	4,02434	-4,38376	1,17E-05	0,000377426	yes
FLNC (2 of 2)	groupXIX:11818853-11840148	control	clone XII	0,669461	17,0993	4,67479	-3,43306	0,000596803	0,0100888	yes
KLF13	groupXIX:12552459-12562563	control	clone XII	5,31155	50,9135	3,26084	-3,00108	0,00269023	0,0339758	yes
ENSGACG00000011846	groupXIX:15110438-15111429	control	clone XII	432,416	34,067	-3,66598	3,16562	0,00154755	0,0218473	yes
HGF (1 of 2)	groupXIX:16212949-16226790	control	clone XII	0,939907	13,9528	3,89189	-2,93512	0,00333421	0,0402571	yes
ZC3HAV1	groupXIX:17534449-17539112	control	clone XII	35,2857	21,6113	-0,707299	3,00616	0,00264566	0,0335286	yes
ELL (2 of 2)	groupXV:8297534-8304173	control	clone XII	6,00553	53,2518	3,14847	-3,48949	0,000483939	0,00850258	yes
FERMT2	groupXV:8881764-8912733	control	clone XII	7,96454	20,0118	1,32919	-2,93676	0,00331657	0,0400882	yes
THBS1 (2 of 2)	groupXV:2296799-2303009	control	clone XII	5,34663	37,0327	2,7921	-3,19578	0,00139455	0,0200972	yes
ENSGACG00000006109	groupXV:2485490-2488657	control	clone XII	7,00411	168,097	4,58495	-2,88636	0,00389729	0,0455018	yes
ENSGACG00000009559	groupXV:7482605-7486604	control	clone XII	9,01124	78,2715	3,11869	-2,86557	0,00416257	0,0478894	yes
LRRFIP1 (1 of 2)	groupXVI:2173128-2210140	control	clone XII	33,9855	73,6969	1,11668	-4,70818	2,50E-06	0,000102155	yes
CASQ2 (1 of 2)	groupXVI:8508601-8514153	control	clone XII	2,91036	20,2521	2,7988	-3,60492	0,00031225	0,00592639	yes
MYL1	groupXVI:12804558-12809401	control	clone XII	63,654	3,31007	-4,26532	3,58378	0,000338662	0,00633876	yes
CPO (1 of 2)	groupXVI:15032955-15040739	control	clone XII	1,08007	11,1479	3,36757	-2,93108	0,00337791	0,0406752	yes
FHL2 (1 of 2)	groupXVI:7350266-7355490	control	clone XII	1,13922	21,1583	4,21511	-3,04155	0,00235361	0,0305561	yes
SIK1	groupXVI:7764692-7770611	control	clone XII	1,81871	20,9638	3,52691	-3,68744	0,000226519	0,00454395	yes
RGCC	groupXVI:17924002-17926186	control	clone XII	28,2047	157,304	2,47955	-2,88421	0,00392402	0,0457509	yes
SLC2A9	groupXVII:8676249-8728831	control	clone XII	16,4753	24,5507	0,575455	-3,01012	0,00261144	0,0331865	yes
SLC41A3 (1 of 2)	groupXVII:10995214-11001714	control	clone XII	0,495218	20,1056	5,34339	-3,26575	0,00109175	0,0165003	yes
ENSGACG00000005023	groupXVII:3249923-3258158	control	clone XII	15,2506	0,816368	-4,2235	3,39317	0,000690882	0,0113689	yes
ENSGACG00000011845	groupXVII:14049189-14058105	control	clone XII	0,629198	14,6913	4,5453	-3,50348	0,000459224	0,00814659	yes
ENSGACG00000007661	groupXVIII:6547159-6551089	control	clone XII	2,14093	488,653	7,83442	-3,90291	9,50E-05	0,00220425	yes
HSP90AA1 (2 of 2)	groupXVIII:14758906-14763271	control	clone XII	0,284546	13,5545	5,57397	-3,25495	0,00113414	0,0170196	yes
ENSGACG00000010476	groupXVIII:10338804-10341156	control	clone XII	1,60684	68,2926	5,40943	-4,20233	2,64E-05	0,000754814	yes
CRIP2 (2 of 2)	groupXVIII:13111961-13116856	control	clone XII	2,78183	39,5776	3,83058	-2,90048	0,00372596	0,0439342	yes
ENSGACG00000013782	groupXVIII:16190238-16196307	control	clone XII	0,146639	8,39175	5,83863	-3,62568	0,000288207	0,00554683	yes
ENSGACG00000003030	groupXX:279325-280477	control	clone XII	50,9171	2822,85	5,79286	-3,17309	0,00150825	0,021398	yes
PAFAH1B3	groupXX:10901664-10911782	control	clone XII	55,2448	37,1866	-0,571056	6,31589	2,69E-10	3,68E-08	yes
ENSGACG00000012464	groupXX:13746909-13747781	control	clone XII	12,0529	140,599	3,54413	-4,07328	4,64E-05	0,00120915	yes
NR0B2	groupXX:8131362-8132271	control	clone XII	22,4858	2,61685	-3,10311	3,01805	0,00254404	0,0325081	yes
ENSGACG00000009825	groupXX:11526900-11530777	control	clone XII	51,1364	159,246	1,63884	-5,03898	4,68E-07	2,44E-05	yes
ENSGACG00000013326	groupXX:16113437-16115257	control	clone XII	21,0658	102,228	2,27882	-2,86003	0,00423595	0,0485501	yes
CSRNP1 (1 of 2)	groupXXI:8204340-8207525	control	clone XII	4,148	40,6604	3,29314	-3,5791	0,000344783	0,00643374	yes
CCR9 (1 of 2)	groupXXI:10240244-10243103	control	clone XII	2,60228	31,9553	3,61821	-3,18989	0,00142329	0,0204245	yes
MYOM1 (1 of 2)	groupXXI:9598720-9617679	control	clone XII	1,09627	20,2937	4,21035	-5,70918	1,14E-08	9,83E-07	yes
ENSGACG00000014852	scaffold_1014:540-2461	control	clone XII	56,6342	2208,16	5,28503	-2,93527	0,00333253	0,0402405	yes
ENSGACG00000010623	scaffold_133:23068-23662	control	clone XII	7,28838	1156,12	7,30947	-3,69672	0,000218405	0,00440972	yes
ENSGACG00000001073	scaffold_150:33953-42506	control	clone XII	0,772018	41,6602	5,75389	-3,57084	0,000355838	0,00660242	yes
CKMT2 (1 of 2)	scaffold_168:135091-142324	control	clone XII	4,79413	28,2488	2,55885	-3,71015	0,000207135	0,00421821	yes
ENSGACG00000001311	scaffold_255:7830-8361	control	clone XII	17,5203	0,972986	-4,17047	2,8685	0,0041242	0,0475451	yes
CYP27B1	scaffold_27:1199139-1205181	control	clone XII	7,50464	51,4143	2,77632	-3,62713	0,000286586	0,00552035	yes
FKBP5	scaffold_27:4190407-4197823	control	clone XII	16,0105	643,702	5,3293	-4,16292	3,14E-05	0,000872874	yes
ENSGACG00000001522	scaffold_27:4394391-4405173	control	clone XII	34,2664	1,79547	-4,25436	3,46033	0,00053952	0,00929369	yes
ENSGACG00000015110	scaffold_68:419739-424812	control	clone XII	6,49059	72,4721	3,481	-3,57348	0,000352268	0,00654712	yes
TNNC1	scaffold_68:530264-533797	control	clone XII	0,849758	314,511	8,53184	-4,74459	2,09E-06	8,77E-05	yes
CASQ1 (1 of 2)	scaffold_713:7518-10179	control	clone XII	20,5969	0,602345	-5,09569	4,01581	5,92E-05	0,00148545	yes
SNRNP70	scaffold_80:215861-221505	control	clone XII	164,659	268,48	0,705332	-4,6909	2,72E-06	0,000109908	yes
MPZL3	groupI:2301707-2308184	control	clone I	20,6773	0,719246	-4,84542	2,85613	0,00428842	0,0490083	yes
ENSGACG00000006790	groupI:4118508-4121716	control	clone I	26,7257	1,47477	-4,17966	4,78474	1,71E-06	7,40E-05	yes
ENSGACG00000008353	groupI:7086896-7088717	control	clone I	79,6185	249,28	1,64659	-3,05188	0,00227412	0,0297279	yes
SCARF1	groupI:7557007-7561871	control	clone I	1,35193	7,31467	2,43577	-2,91146	0,00359746	0,0427396	yes
ENSGACG00000009173	groupI:8598219-8599405	control	clone I	302,713	2,85227	-6,7297	5,05911	4,21E-07	2,23E-05	yes
DIABLO (1 of 2)	groupI:12409077-12411083	control	clone I	184,466	1,54478	-6,89981	5,28323	1,27E-07	7,95E-06	yes
CKM (1 of 2)	groupI:15913133-15919082	control	clone I	94,7437	10,9748	-3,10984	3,50488	0,000456821	0,00811188	yes
PIPOX	groupI:19754525-19779359	control	clone I	14,2234	0,492803	-4,85111	3,37524	0,000737502	0,0119907	yes
HPX	groupI:20820541-20824484	control	clone I	398,204	4,40762	-6,49736	7,85283	4,00E-15	1,59E-12	yes
ENSGACG00000014752	groupI:22723989-22724814	control	clone I	73,7738	4,62438	-3,99578	4,49122	7,08E-06	0,000247575	yes
ACADL	groupI:22725531-22729041	control	clone I	8,51763	0,710995	-3,58254	3,6128	0,000302908	0,00577917	yes
F2	groupI:27446959-27451949	control	clone I	300,719	5,32866	-5,8185	4,21883	2,46E-05	0,000709851	yes
ENSGACG00000015464	groupI:27507091-27513914	control	clone I	87,4185	1,38394	-5,98109	9,39489	0	0	yes
ENSGACG00000015472	groupI:27514140-27518203	control	clone I	138,882	1,27932	-6,76234	6,03991	1,54E-09	1,72E-07	yes
F10	groupI:27519217-27524787	control	clone I	95,2491	0,976222	-6,60835	5,60146	2,13E-08	1,69E-06	yes
PROZ (2 of 2)	groupI:27525490-27526891	control	clone I	101,777	1,6277	-5,96644	6,12034	9,34E-10	1,11E-07	yes
ENSGACG00000004413	groupI:65278-68049	control	clone I	461,416	3,45206	-7,06247	8,11995	4,44E-16	2,06E-13	yes
ENSGACG00000004822	groupI:514071-517686	control	clone I	32,7467	1,34519	-4,60546	3,83841	0,000123834	0,00274885	yes
ENSGACG00000005067	groupI:853150-864471	control	clone I	5,9233	0,694187	-3,09301	3,0595	0,00221705	0,029132	yes
ENSGACG00000005228	groupI:992280-1011125	control	clone I	70,0829	7,95403	-3,1393	3,06372	0,00218601	0,0288072	yes
CFB	groupI:2156319-2166868	control	clone I	76,4034	3,73169	-4,35573	4,43501	9,21E-06	0,000309066	yes
APOA1	groupI:2218129-2220146	control	clone I	7751,65	85,9806	-6,49435	3,04632	0,00231658	0,0301725	yes
ZFP36	groupI:7086896-7088717	control	clone I	96,7982	289,558	1,5808	-2,9206	0,00349363	0,0417529	yes
VTN (2 of 2)	groupI:7562562-7566990	control	clone I	52,3546	0,527891	-6,63193	8,5594	0	0	yes
SLC1A5	groupI:9146858-9153860	control	clone I	9,29285	52,7302	2,50444	-4,23594	2,28E-05	0,000665632	yes
SERPINF2	groupI:11927309-11930245	control	clone I	93,4635	1,34301	-6,12086	5,97217	2,34E-09	2,48E-07	yes
TTC36	groupI:15021861-15023385	control	clone I	135,287	7,47197	-4,17839	4,32926	1,50E-05	0,00046637	yes
FOXA3	groupI:16176221-16179190	control	clone I	16,4883	0,438711	-5,23203	4,18186	2,89E-05	0,000813889	yes
CYP2C9	groupI:16588423-16592719	control	clone I	511,423	7,2575	-6,1389	3,83073	0,000127764	0,00282169	yes
ABCB11	groupI:20584817-20596751	control	clone I	43,5289	0,214603	-7,66416	5,23733	1,63E-07	9,85E-06	yes
CD2	groupI:22023621-22036587	control	clone I	33,6114	18,5357	-0,85864	2,86208	0,00420864	0,0483043	yes
ENSGACG00000015411	groupI:27359084-27364279	control	clone I	132,116	0,73691	-7,4861	8,06308	6,66E-16	3,01E-13	yes
KYNU	groupI:27953680-27957166	control	clone I	9,8258	0,762041	-3,68863	3,18597	0,00144268	0,0206476	yes
PCSK6	groupII:3557485-3572495	control	clone I	7,29586	0,159974	-5,51117	3,8576	0,000114506	0,00257593	yes
METTL21C (2 of 2)	groupII:7652953-7655900	control	clone I	8,25195	0,337914	-4,61001	3,28633	0,00101504	0,0155482	yes
ENSGACG00000016298	groupII:14551247-14569051	control	clone I	21,2148	136,593	2,68674	-5,22434	1,75E-07	1,05E-05	yes
PACSIN3	groupII:21849504-21862280	control	clone I	6,30045	0,838581	-2,90943	3,0473	0,00230907	0,030093	yes
SLC27A2 (1 of 3)	groupII:5785622-5789071	control	clone I	14,2102	0,535006	-4,73123	4,34004	1,42E-05	0,000447399	yes
MPHOSPH10	groupII:8638771-8642484	control	clone I	21,2623	35,6582	0,745934	-3,35691	0,000788192	0,0126571	yes
LIPC	groupII:11310522-11317108	control	clone I	46,3473	0,820648	-5,81958	6,42973	1,28E-10	1,91E-08	yes
ENSGACG00000016168	groupII:13640059-13643928	control	clone I	126,25	9,26598	-3,7682	3,70914	0,000207965	0,00423221	yes
TNNT3 (2 of 2)	groupII:21934735-21940961	control	clone I	21,9067	2,20437	-3,31293	3,2861	0,00101584	0,0155582	yes
ENSGACG00000012390	groupIII:57692-62220	control	clone I	12,7787	2,487	-2,36126	4,60897	4,05E-06	0,000154115	yes
IGFBP1 (2 of 2)	groupIII:599860-601840	control	clone I	88,5685	2,21784	-5,31957	4,54726	5,43E-06	0,000197849	yes
ENSGACG00000014348	groupIII:3914290-3917139	control	clone I	118,266	3,11388	-5,24718	4,82948	1,37E-06	6,11E-05	yes
CYP7A1	groupIII:5080002-5084046	control	clone I	74,8458	4,59683	-4,02521	8,35227	0	0	yes
ANGPTL3 (1 of 2)	groupIII:9794900-9798464	control	clone I	16,4538	1,00918	-4,02717	4,02858	5,61E-05	0,00141944	yes
C8B	groupIII:10056597-10062502	control	clone I	189,341	1,62499	-6,86441	8,06574	6,66E-16	3,01E-13	yes
CYP8B1	groupIII:13910746-13912276	control	clone I	174,42	4,1598	-5,38991	4,74831	2,05E-06	8,64E-05	yes
TF	groupIII:1601833-1608377	control	clone I	519,092	5,38098	-6,59198	3,28432	0,0010223	0,0156394	yes
AGXT (1 of 2)	groupIII:1651825-1658273	control	clone I	501,244	6,15872	-6,34674	5,40057	6,64E-08	4,54E-06	yes
ARL14 (2 of 2)	groupIII:2130943-2132187	control	clone I	50,9696	0	-1,80E+308	-1,80E+308	0,000483262	0,00849264	yes
ENSGACG00000016104	groupIII:9402020-9405305	control	clone I	389,573	2,8436	-7,09803	5,14956	2,61E-07	1,48E-05	yes
C8A	groupIII:10062735-10068969	control	clone I	107,029	1,39908	-6,25739	5,60899	2,04E-08	1,63E-06	yes
ENSGACG00000017655	groupIII:15101195-15104255	control	clone I	16,3825	0,462	-5,14812	2,95363	0,00314064	0,0384026	yes
FOSL1	groupIV:5471462-5474199	control	clone I	0,765935	53,2918	6,12055	-5,28694	1,24E-07	7,82E-06	yes
ALDOB	groupIV:10687389-10690122	control	clone I	1405,18	59,6398	-4,55834	2,97468	0,00293298	0,036396	yes
AKR1D1 (1 of 2)	groupIV:20000830-20003316	control	clone I	12,1264	1,573	-2,94657	3,15751	0,00159121	0,0223358	yes
ENSGACG00000019066	groupIV:21221531-21246568	control	clone I	135,535	0,526396	-8,0083	6,35953	2,02E-10	2,86E-08	yes
PFKFB3	groupIV:22147683-22153447	control	clone I	3,48231	17,4462	2,3248	-3,03375	0,00241536	0,0311969	yes
ENSGACG00000019604	groupIV:26375263-26387285	control	clone I	24,7455	0,358662	-6,1084	3,71056	0,000206805	0,00421261	yes
ITIH2	groupIV:32581141-32590002	control	clone I	121,681	0,712182	-7,41664	6,56268	5,28E-11	8,71E-09	yes
TDO2	groupIV:2044919-2048363	control	clone I	318,447	2,27796	-7,12716	5,15877	2,49E-07	1,42E-05	yes

F9 (1 of 2)	groupIV:5886033-5889741	control	clone I	20,2907	0,515424	-5,29892	4,01848	5,86E-05	0,0014714	yes
ENSGACG00000017681	groupIV:8369910-8376071	control	clone I	56,7715	0,9923	-5,83825	6,0513	1,44E-09	1,62E-07	yes
DUSP1	groupIV:12886000-12888151	control	clone I	28,7006	110,183	1,94075	-3,48918	0,000484509	0,00851018	yes
SLC7A2	groupIV:15845226-15851658	control	clone I	5,75031	0,561914	-3,35522	2,94676	0,00321126	0,0390847	yes
ENSGACG00000018662	groupIV:16111937-16112913	control	clone I	2,14062	72,5282	5,08244	-4,85482	1,20E-06	5,49E-05	yes
ENSGACG00000019517	groupIV:25729864-25732188	control	clone I	42,0835	0,844178	-5,63956	4,37383	1,22E-05	0,000392214	yes
GZMM (2 of 5)	groupIV:27227060-27229334	control	clone I	285,553	142,723	-1,00054	3,39214	0,000693498	0,0114051	yes
ENSGACG00000020047	groupIV:32137225-32150243	control	clone I	119,3	1,5317	-6,28332	6,00718	1,89E-09	2,06E-07	yes
AMDHD1	groupIV:32240949-32243596	control	clone I	21,6556	2,21775	-3,28757	3,51666	0,000437006	0,00782273	yes
ENSGACG00000015947	groupIX:536210-537286	control	clone I	319,541	2,93433	-6,76683	5,24229	1,59E-07	9,63E-06	yes
ENSGACG00000016696	groupIX:4874659-4879492	control	clone I	27,1214	1,22582	-4,46761	4,39548	1,11E-05	0,000360747	yes
TLR3	groupIX:5558989-5568796	control	clone I	87,3861	5,66948	-3,94611	4,41875	9,93E-06	0,000329494	yes
PROM1 (1 of 2)	groupIX:6017778-6033654	control	clone I	8,30683	0,635736	-3,7078	3,40986	0,000649955	0,0108147	yes
UCP1	groupIX:7336538-7339192	control	clone I	80,5267	2,7143	-4,89081	5,44716	5,12E-08	3,62E-06	yes
ENSGACG00000017299	groupIX:7361805-7366999	control	clone I	11,0185	1,17487	-3,22936	3,61955	0,000295118	0,0056563	yes
C3 (5 of 8)	groupIX:14166950-14195682	control	clone I	131,06	1,43388	-6,51416	4,85991	1,17E-06	5,37E-05	yes
JUNB (2 of 2)	groupIX:15395448-15396453	control	clone I	4,48677	68,0492	3,92283	-4,92611	8,39E-07	4,03E-05	yes
PGLYRP2 (2 of 2)	groupIX:16505862-16507955	control	clone I	302,534	2,23121	-7,08313	9,05243	0	0	yes
ENSGACG00000019454	groupIX:17624636-17627363	control	clone I	45,423	1,51914	-4,9021	4,93623	7,96E-07	3,85E-05	yes
ENSGACG00000016093	groupIX:1416676-1419531	control	clone I	75,4932	2,99851	-4,65403	4,40525	1,06E-05	0,000347233	yes
ENSGACG00000016669	groupIX:4852740-4874111	control	clone I	106,17	3,10583	-5,09526	7,29072	3,08E-13	8,60E-11	yes
ENSGACG00000016687	groupIX:4852740-4874111	control	clone I	52,5163	1,80064	-4,86618	4,63081	3,64E-06	0,000140877	yes
FGG	groupIX:5484649-5487425	control	clone I	691,321	9,6122	-6,16835	4,32288	1,54E-05	0,000477944	yes
ARHGEF38 (1 of 2)	groupIX:8216878-8222294	control	clone I	6,71846	0,258794	-4,69825	3,24866	0,00115952	0,0173272	yes
SMOX	groupIX:8508224-8518163	control	clone I	10,698	296,257	4,79144	-7,57117	3,71E-14	1,24E-11	yes
SERPING1	groupIX:9801276-9804719	control	clone I	265,943	13,3341	-4,31792	3,75216	0,000175318	0,00367152	yes
PLA2G12B (1 of 2)	groupIX:10171913-10174516	control	clone I	20,388	1,76281	-3,53177	3,32436	0,000886224	0,0139178	yes
QPRT	groupIX:10183493-10196687	control	clone I	16,83	0,833775	-4,33523	3,55732	0,000374656	0,00689165	yes
ENSGACG00000018216	groupIX:10487352-10490421	control	clone I	7,82809	16,6529	1,08904	-4,34583	1,39E-05	0,000437473	yes
PRF1 (2 of 5)	groupIX:12707605-12709413	control	clone I	2,84543	19,7145	2,79254	-3,29845	0,000972212	0,0150142	yes
APOH (2 of 2)	groupIX:12782663-12786527	control	clone I	72,1892	1,31958	-5,77363	4,84302	1,28E-06	5,77E-05	yes
C3 (3 of 8)	groupIX:14623792-14644206	control	clone I	159,784	1,87542	-6,41276	4,62039	3,83E-06	0,000146982	yes
C3 (4 of 8)	groupIX:14652547-14675692	control	clone I	862,33	8,5632	-6,65395	3,65926	0,000252949	0,0049805	yes
DDIT4 (1 of 2)	groupV:834468-835775	control	clone I	21,1832	315,578	3,897	-5,79714	6,75E-09	6,25E-07	yes
G6PC (2 of 2)	groupV:3963771-3966292	control	clone I	46,1262	0,962539	-5,5826	5,79611	6,79E-09	6,28E-07	yes
HABP2 (1 of 2)	groupV:8374943-8379475	control	clone I	214,977	0,782844	-8,10124	8,01743	1,11E-15	4,85E-13	yes
ATP2A1 (2 of 2)	groupV:9492038-9501201	control	clone I	52,3358	3,99033	-3,71322	3,91569	9,01E-05	0,00210823	yes
PRODH2	groupV:9634156-9637430	control	clone I	5,7927	0,438428	-3,72383	2,85134	0,00435356	0,0495752	yes
MYBPC2 (1 of 2)	groupV:10018871-10040862	control	clone I	8,76993	0,525714	-4,06022	4,6968	2,64E-06	0,000107191	yes
BAIAP2L1 (1 of 2)	groupV:11265976-11279015	control	clone I	6,6189	0,409909	-4,01322	2,98428	0,00284242	0,03549	yes
SOCS3 (2 of 2)	groupV:2198432-2199203	control	clone I	6,09284	69,9715	3,52158	-4,23256	2,31E-05	0,00067399	yes
G6PC (1 of 2)	groupV:3960090-3962905	control	clone I	71,1395	3,54936	-4,32502	4,63326	3,60E-06	0,000139466	yes
ENSGACG00000007411	groupV:9502265-9515337	control	clone I	28,8618	7,26809	-1,98952	5,01524	5,30E-07	2,71E-05	yes
ALDOA (1 of 2)	groupV:9673591-9680896	control	clone I	169,404	13,3563	-3,66488	8,47487	0	0	yes
ARG1	groupV:12104654-12112727	control	clone I	86,6716	4,27521	-4,34149	5,62981	1,80E-08	1,47E-06	yes
A1CF	groupV:12143017-12152536	control	clone I	140,346	0,457076	-8,26234	6,87772	6,08E-12	1,27E-09	yes
LECT2	groupV:12199129-12200797	control	clone I	943,357	8,64528	-6,76975	6,13256	8,65E-10	1,03E-07	yes
ENSGACG00000002588	groupVI:933406-934265	control	clone I	46,035	8,8865	-2,37304	2,9073	0,00364568	0,0431855	yes
KMO	groupVI:2319889-2328619	control	clone I	9,43394	0,699113	-3,75426	3,4141	0,000639928	0,0106796	yes
MINPP1 (1 of 2)	groupVI:10882411-10887130	control	clone I	22,2469	1,42292	-3,96668	4,10499	4,04E-05	0,00107799	yes
AGT	groupVI:11880471-11883962	control	clone I	206,977	3,14586	-6,03987	5,60208	2,12E-08	1,69E-06	yes
ENSGACG00000010247	groupVI:12459327-12462277	control	clone I	18,8786	0	-1,80E+308	-1,80E+308	0,00338142	0,040709	yes
ENSGACG00000011392	groupVI:14974758-14976817	control	clone I	903,521	7,00156	-7,01174	8,71261	0	0	yes
MCFD2	groupVI:934291-937136	control	clone I	72,193	12,2933	-2,55399	3,11109	0,00186398	0,0253707	yes
HAAO	groupVI:1320204-1324886	control	clone I	238,537	1,59653	-7,22313	7,74284	9,77E-15	3,62E-12	yes
HABP2 (2 of 2)	groupVI:3639818-3643625	control	clone I	475,154	3,72874	-6,99357	6,17585	6,58E-10	8,12E-08	yes
ENSGACG00000007954	groupVI:9278390-9279275	control	clone I	148,429	1,2822	-6,85502	6,00842	1,87E-09	2,04E-07	yes
MAT1A (2 of 2)	groupVI:9279540-9284697	control	clone I	140,89	0,275573	-8,99792	4,40854	1,04E-05	0,000342925	yes
IL22RA1	groupVI:12967223-12968806	control	clone I	0	22,5365	1,80E+308	1,80E+308	0,000758843	0,0122712	yes
ENSGACG00000012414	groupVI:17075679-17076923	control	clone I	2775,5	41,2004	-6,07395	4,48192	7,40E-06	0,000256922	yes
FGB	groupVII:527974-532446	control	clone I	966,212	9,56565	-6,65833	4,1639	3,13E-05	0,000869675	yes
ENSGACG00000019954	groupVII:9000504-9004170	control	clone I	20,7937	0	-1,80E+308	-1,80E+308	0,000184771	0,00383646	yes
ENSGACG00000019958	groupVII:9005339-9006568	control	clone I	19,6919	0,784009	-4,65059	3,66886	0,00024363	0,00482813	yes
ENSGACG00000020003	groupVII:9332309-9336306	control	clone I	53,4854	153,005	1,51637	-2,90165	0,00371209	0,0438077	yes
CKM (2 of 2)	groupVII:12658665-12661721	control	clone I	87,5361	8,59682	-3,348	3,70183	0,000214047	0,00433574	yes
MLXIPL	groupVII:14513149-14527273	control	clone I	23,2135	0,265948	-6,44768	5,05817	4,23E-07	2,24E-05	yes
TM7SF2	groupVII:15454237-15462511	control	clone I	8,28028	0,765937	-3,43438	3,36414	0,000767822	0,0123918	yes
KL	groupVII:19999570-20005838	control	clone I	14,4674	0,336389	-5,42654	4,70132	2,58E-06	0,000105166	yes
ENSGACG00000020566	groupVII:20248461-20250782	control	clone I	39,5668	0,453344	-6,44754	5,2203	1,79E-07	1,07E-05	yes
PVRL1 (2 of 2)	groupVII:21614700-21623583	control	clone I	11,0099	0,514717	-4,41888	3,38766	0,000704906	0,0115593	yes
PYGM (2 of 2)	groupVII:21858508-21866071	control	clone I	29,3403	1,31025	-4,48498	4,4887	7,17E-06	0,000250079	yes
ENSGACG00000020653	groupVII:21876768-21881377	control	clone I	120,16	0,675023	-7,47581	7,92689	2,22E-15	9,22E-13	yes
ENSGACG00000020833	groupVII:26254567-26256332	control	clone I	23,2785	0	-1,80E+308	-1,80E+308	0,00120415	0,0178592	yes
CLDN2	groupVII:26257018-26258074	control	clone I	23,8342	1,22004	-4,28803	3,33528	0,000852125	0,0134805	yes
ENSGACG00000020873	groupVII:27118887-27183608	control	clone I	10,042	0,229667	-5,45036	3,03854	0,00237727	0,0308005	yes
ENSGACG00000020917	groupVII:27905755-27917076	control	clone I	63,1967	1,39173	-5,5049	6,68789	2,26E-11	4,10E-09	yes
FGA	groupVII:533689-538270	control	clone I	297,764	3,98393	-6,22383	6,54562	5,93E-11	9,64E-09	yes
CIDEB	groupVII:2913581-2915531	control	clone I	114,571	1,45083	-6,30322	5,06898	4,00E-07	2,13E-05	yes
SHBG	groupVII:4261544-4265559	control	clone I	89,9265	2,36782	-5,24712	4,84318	1,28E-06	5,77E-05	yes
AGXT2L1	groupVII:6668656-6676279	control	clone I	23,4212	1,58004	-3,88978	3,92901	8,53E-05	0,00201361	yes
ENSGACG00000019794	groupVII:7663663-7666824	control	clone I	39,9466	20,3144	-0,975571	5,42903	5,67E-08	3,95E-06	yes
ENSGACG00000020141	groupVII:12180538-12185054	control	clone I	1,86851	16,9382	3,18032	-3,67202	0,000240639	0,00477727	yes
ENSGACG00000020145	groupVII:12192535-12195407	control	clone I	104,832	986,547	3,23431	-3,04575	0,00232098	0,0302184	yes
DGAT2	groupVII:13452420-13459982	control	clone I	39,5337	4,5413	-3,12191	3,50576	0,000455311	0,00808893	yes
MOGAT2	groupVII:13463876-13470302	control	clone I	26,2873	0,409741	-6,00351	3,60648	0,000310383	0,00589669	yes
ENSGACG00000020249	groupVII:14910164-14914696	control	clone I	6,2792	0,148869	-5,39847	2,99509	0,00274362	0,0345076	yes
F9 (2 of 2)	groupVII:18693246-18697244	control	clone I	46,8491	1,36732	-5,0986	4,96071	7,02E-07	3,46E-05	yes
ENSGACG00000020469	groupVII:19028240-19050014	control	clone I	0,632878	29,8211	5,55826	-4,6702	3,01E-06	0,000119773	yes
CLDN3 (2 of 4)	groupVII:19279729-19280380	control	clone I	23,8867	151,87	2,66856	-4,14645	3,38E-05	0,000927284	yes
ENSGACG00000020613	groupVII:21434982-21444290	control	clone I	14,4618	0,35381	-5,35313	3,07574	0,0020998	0,0279061	yes
ENSGACG00000020614	groupVII:21446433-21456144	control	clone I	7,22135	0,57043	-3,66215	3,03569	0,00239987	0,0310392	yes
LRCH2	groupVII:22687320-22700908	control	clone I	4,69888	11,5817	1,30146	-3,84267	0,000121702	0,00270948	yes
ALDH9A1 (1 of 2)	groupVIII:2132915-2145512	control	clone I	152,458	34,9417	-2,12538	4,3679	1,25E-05	0,000401432	yes
GLUL (1 of 2)	groupVIII:2254738-2260142	control	clone I	9,4487	31,417	1,73336	-3,59002	0,000330657	0,0062155	yes
GADD45A (2 of 2)	groupVIII:2281601-2283393	control	clone I	34,617	159,431	2,20338	-3,61132	0,000304648	0,00580618	yes
ENSGACG00000004463	groupVIII:3125645-3129121	control	clone I	11,2374	0,554237	-4,34166	3,30475	0,000950603	0,0147431	yes
AGXT (2 of 2)	groupVIII:3130254-3133238	control	clone I	103,829	1,78988	-5,85821	5,59255	2,24E-08	1,77E-06	yes
IRF4 (2 of 2)	groupVIII:3510443-3515871	control	clone I	24,12	64,276	1,41405	-3,20031	0,00137279	0,0198463	yes
ENSGACG00000005883	groupVIII:5803164-5824796	control	clone I	438,729	4,58414	-6,58054	6,92115	4,48E-12	9,65E-10	yes
KNG1	groupVIII:6356135-6360741	control	clone I	244,931	1,67128	-7,19528	6,05948	1,37E-09	1,55E-07	yes
TM4SF4	groupVIII:6672510-6675919	control	clone I	79,6986	0	-1,80E+308	-1,80E+308	8,85E-05	0,00207617	yes
ENSGACG00000006545	groupVIII:6934996-6939923	control	clone I	45,4302	0,962567	-5,56062	5,06115	4,17E-07	2,21E-05	yes
ANGPTL4 (2 of 2)	groupVIII:9502642-9506528	control	clone I	13,4551	2,50334	-2,42623	3,47993	0,00050154	0,00875473	yes
ENSGACG00000010050	groupVIII:12782195-12784724	control	clone I	6,09156	33,2096	2,44672	-5,08758	3,63E-07	1,96E-05	yes
GPX4 (2 of 4)	groupVIII:17193570-17195072	control	clone I	348,728	13,9968	-4,63893	4,65557	3,23E-06	0,000127237	yes
GPX4 (3 of 4)	groupVIII:17201147-17204765	control	clone I	56,6961	2,20436	-4,68482	3,23021	0,001237	0,0182546	yes
CYP2J2 (3 of 6)	groupVIII:19106718-19119924	control	clone I	93,2564	1,54381	-5,91664	6,26973	3,62E-10	4,79E-08	yes
FETUB (1 of 3)	groupVIII:5057121-5059646	control	clone I	82,2114	2,73215	-4,91123	4,51637	6,29E-06	0,000223929	yes
FETUB (2 of 3)	groupVIII:5061229-5065590	control	clone I	510,949	8,79642	-5,86012	4,48966	7,13E-06	0,000249092	yes
FETUB (3 of 3)	groupVIII:5068180-5071857	control	clone I	757,164	5,73774	-7,04398	4,9951	5,88E-07	2,97E-05	yes
RGS5	groupVIII:5098754-5105517	control	clone I	558,091	946,317	0,761822	-3,58826	0,000332895	0,00624974	yes
ENSGACG00000005760	groupVIII:5120336-5122462	control	clone I	12,2208	56,5007	2,20893	-4,24768	2,16E-05	0,000636833	yes
ENSGACG00000007505	groupVIII:8499418-8502408	control	clone I	26,3575	0,350652	-6,23203	3,16599	0,00154558	0,0218252	yes
ARRDC2	groupVIII:9263821-9271184	control	clone I	44,4484	105,967	1,25342	-3,22919	0,00124141	0,0183076	yes

ELTD1	groupVIII:12041724-12054205	control	clone I	6,45516	12,8407	0,992205	-2,9397	0,00328525	0,0397884	yes
ENSGACG00000009633	groupVIII:12452844-12462417	control	clone I	86,9571	4,35463	-4,31968	5,50153	3,77E-08	2,78E-06	yes
CTBS	groupVIII:12482038-12487949	control	clone I	26,8155	21,7542	-0,301773	3,23528	0,00121522	0,017992	yes
CYP2J2 (1 of 6)	groupVIII:15158423-15165942	control	clone I	62,7251	1,01744	-5,94602	6,68904	2,25E-11	4,07E-09	yes
CYP2J2 (2 of 6)	groupVIII:15168449-15172576	control	clone I	34,9999	0,554584	-5,9798	4,89375	9,89E-07	4,63E-05	yes
ENSGACG00000012189	groupVIII:15443975-15446518	control	clone I	13,1098	3,22158	-2,0248	2,95116	0,00316587	0,0386472	yes
CREB3L3	groupVIII:16297684-16302922	control	clone I	13,2353	0,724456	-4,19135	3,81542	0,000135954	0,00297071	yes
GZMM (3 of 5)	groupVIII:16529393-16532680	control	clone I	406,144	178,592	-1,18532	4,79526	1,62E-06	7,08E-05	yes
SERPINC1	groupVIII:17468884-17472470	control	clone I	221,706	2,04125	-6,76305	5,03494	4,78E-07	2,48E-05	yes
APOE (2 of 2)	groupX:2070460-2073621	control	clone I	185,613	1,27539	-7,18521	6,48867	8,66E-11	1,35E-08	yes
ENSGACG00000009880	groupX:15250779-15253079	control	clone I	550,808	6,46515	-6,41272	4,92281	8,53E-07	4,09E-05	yes
ENSGACG00000009883	groupX:15255685-15258047	control	clone I	541,114	5,18475	-6,70551	5,32832	9,91E-08	6,42E-06	yes
SDC2	groupX:3735743-3766158	control	clone I	73,4026	15,2378	-2,26818	2,92586	0,00343504	0,041209	yes
ENSGACG00000003808	groupX:5271209-5271936	control	clone I	64,0867	5,49793	-3,54307	3,46568	0,000528889	0,00914422	yes
TMEM79 (1 of 2)	groupX:6592120-6595289	control	clone I	8,41312	0,665801	-3,65948	3,06959	0,00214352	0,0283688	yes
ENSGACG00000007507	groupX:11295093-11298006	control	clone I	228,053	12,2984	-4,21283	4,17436	2,99E-05	0,000836944	yes
ENPP2 (2 of 2)	groupX:14812601-14836398	control	clone I	39,8483	2,61654	-3,92879	4,11109	3,94E-05	0,00105437	yes
ENSGACG00000004324	groupXI:52382-61941	control	clone I	41,0703	78,6051	0,936529	-4,12218	3,75E-05	0,00101272	yes
JUNB (1 of 2)	groupXI:3309436-3310423	control	clone I	14,9186	76,5929	2,3601	-3,60219	0,000315549	0,00597811	yes
MMD2 (2 of 2)	groupXI:4946344-4951950	control	clone I	16,7907	0,660562	-4,66782	3,55033	0,000384744	0,00704481	yes
ENSGACG00000008064	groupXI:5057905-5058802	control	clone I	1,52053	13,8352	3,18569	-3,1866	0,00143956	0,0206125	yes
ENSGACG00000009952	groupXI:7727054-7730471	control	clone I	28,8209	0,614784	-5,55089	5,41306	6,20E-08	4,28E-06	yes
ENSGACG00000010000	groupXI:7761755-7772062	control	clone I	19,8391	1,23915	-4,00092	4,25664	2,08E-05	0,000615638	yes
ENSGACG00000010018	groupXI:7778850-7790441	control	clone I	6,87388	0,283187	-4,6013	4,4298	9,43E-06	0,000315442	yes
LPAR2 (2 of 2)	groupXI:7837282-7840258	control	clone I	20,0645	11,0688	-0,858139	2,9612	0,00306445	0,0376745	yes
CYP2W1 (1 of 5)	groupXI:9721383-9723273	control	clone I	139,41	1,33772	-6,70341	6,79994	1,05E-11	2,06E-09	yes
ENSGACG00000012174	groupXI:11252518-11253786	control	clone I	195,221	24,0729	-3,01963	3,56196	0,000368091	0,00679049	yes
NME4	groupXI:12533937-12535079	control	clone I	212,57	1,94366	-6,77302	5,3897	7,06E-08	4,79E-06	yes
MYLPF (2 of 2)	groupXI:13368252-13371517	control	clone I	141,621	20,0123	-2,82307	3,2037	0,00135674	0,0196593	yes
IGFALS	groupXI:13771947-13774024	control	clone I	56,016	1,41317	-5,30884	4,73186	2,22E-06	9,25E-05	yes
ENSGACG00000014915	groupXI:16290189-16293487	control	clone I	31,0099	90,5016	1,54522	-4,63441	3,58E-06	0,000138829	yes
HAO1	groupXI:562837-569808	control	clone I	75,0633	1,64623	-5,51087	6,32367	2,55E-10	3,52E-08	yes
ENSGACG00000008053	groupXI:5019934-5020840	control	clone I	7,88532	61,1939	2,95615	-3,97102	7,16E-05	0,00173896	yes
ENSGACG00000008055	groupXI:5020849-5021746	control	clone I	8,90505	58,241	2,70934	-3,71368	0,000204268	0,0041701	yes
SOCS3 (1 of 2)	groupXI:9066120-9067557	control	clone I	8,54547	277,545	5,02142	-6,557	5,49E-11	9,00E-09	yes
TIMP2 (1 of 2)	groupXI:9123939-9129853	control	clone I	31,7816	103,304	1,70064	-2,88643	0,00389634	0,0454923	yes
ATP2A1 (1 of 2)	groupXI:12754741-12769556	control	clone I	16,9965	2,38112	-2,83553	3,68902	0,000225118	0,00452056	yes
ENSGACG00000014547	groupXI:15599191-15613431	control	clone I	32,7309	4,56317	-2,84255	3,63697	0,000275864	0,00534929	yes
CFP	groupXI:15888750-15891806	control	clone I	95,5085	1,17732	-6,34205	5,6372	1,73E-08	1,42E-06	yes
OVGP1 (3 of 5)	groupXII:2184472-2188227	control	clone I	132,675	1,83444	-6,17641	5,60813	2,05E-08	1,64E-06	yes
TNNC2 (1 of 2)	groupXII:3692239-3694594	control	clone I	38,9134	3,81532	-3,35039	3,69557	0,000219396	0,00442627	yes
CA6 (1 of 2)	groupXII:9898691-9902829	control	clone I	3,44305	35,9483	3,38416	-4,64823	3,35E-06	0,000131179	yes
G6PD (2 of 2)	groupXII:10763215-10767443	control	clone I	13,1035	0,242406	-5,75639	3,28176	0,0010316	0,0157559	yes
DNAJC22	groupXII:11273359-11276126	control	clone I	18,0072	0	-1,80E+308	-1,80E+308	0,000506774	0,00882908	yes
RARG (1 of 2)	groupXII:11512010-11527474	control	clone I	27,2768	86,0143	1,6569	-2,9101	0,00361315	0,0428832	yes
CEBPB	groupXII:15595556-15596471	control	clone I	132,055	579,427	2,13349	-3,43932	0,000583176	0,0098995	yes
ENSGACG00000002805	groupXII:664630-666046	control	clone I	13,8935	0	-1,80E+308	-1,80E+308	0,00120415	0,0178592	yes
PIM1	groupXII:3201121-3203333	control	clone I	66,4996	349,112	2,39227	-3,68486	0,000228829	0,00458258	yes
MOV10 (2 of 2)	groupXII:11935602-11944845	control	clone I	4,05427	12,6562	1,64233	-3,11215	0,00185727	0,0252981	yes
ENSGACG00000010196	groupXII:12771424-12775389	control	clone I	79,947	0,718549	-6,79781	5,38045	7,43E-08	5,01E-06	yes
HNF4A	groupXII:15285392-15289946	control	clone I	30,7907	0,521938	-5,88247	4,74689	2,07E-06	8,69E-05	yes
SLC13A3	groupXII:15510544-15517590	control	clone I	10,6638	0,58379	-4,19113	3,96352	7,39E-05	0,00178488	yes
PPDPF (2 of 2)	groupXII:15736142-15738244	control	clone I	146,846	8,67965	-4,08053	4,29453	1,75E-05	0,000532905	yes
ENSGACG00000006029	groupXIII:4563438-4568919	control	clone I	3099,77	33,0421	-6,55171	3,16939	0,00152758	0,021618	yes
FABP1	groupXIII:5134440-5135110	control	clone I	185,4	4,42985	-5,38724	4,71842	2,38E-06	9,79E-05	yes
HSD17B3	groupXIII:5920864-5926341	control	clone I	35,2854	1,17937	-4,90298	4,92936	8,25E-07	3,97E-05	yes
RFK	groupXIII:8084060-8086494	control	clone I	22,7878	47,4676	1,05868	-3,08284	0,00205034	0,0273804	yes
ENSGACG00000010933	groupXIII:12092539-12093740	control	clone I	1434,34	12,9741	-6,7886	4,94131	7,76E-07	3,77E-05	yes
ENSGACG00000011617	groupXIII:13147140-13149317	control	clone I	2821,64	28,8456	-6,61204	3,68826	0,000225791	0,00453209	yes
ADAMTS13	groupXIII:13880400-13888437	control	clone I	6,34378	1,61993	-1,96941	11,9888	0	0	yes
HNF1A	groupXIII:14760749-14765516	control	clone I	9,21614	0,401784	-4,51967	3,44421	0,000572722	0,00975457	yes
ENSGACG00000013793	groupXIII:17319363-17325641	control	clone I	20,561	0,349338	-5,87914	5,10522	3,30E-07	1,81E-05	yes
ENSGACG00000014699	groupXIII:19762339-19764190	control	clone I	34,8026	0	-1,80E+308	-1,80E+308	0,000131837	0,00289605	yes
SERPIND1	groupXIII:1690423-1713758	control	clone I	205,922	1,73482	-6,89117	5,89333	3,78E-09	3,78E-07	yes
CDO1	groupXIII:4621042-4625012	control	clone I	104,866	13,6866	-2,93771	3,39334	0,000690453	0,011363	yes
ENSGACG00000010145	groupXIII:9883548-9884993	control	clone I	99,6216	1,31987	-6,23799	5,57445	2,48E-08	1,94E-06	yes
BCO2 (3 of 3)	groupXIII:11647541-11663744	control	clone I	13,6918	0,688763	-4,31316	4,26537	2,00E-05	0,000595804	yes
DUSP26 (2 of 2)	groupXIII:13163432-13165076	control	clone I	75,5342	0,751729	-6,65077	3,38819	0,000703562	0,0115414	yes
HPD	groupXIII:13290214-13294920	control	clone I	231,475	1,53371	-7,23769	5,20154	1,98E-07	1,16E-05	yes
UPB1	groupXIII:16314590-16347524	control	clone I	24,7195	1,86239	-3,73042	5,10167	3,37E-07	1,84E-05	yes
NAALADL1	groupXIII:16833470-16840533	control	clone I	6,97233	1,20972	-2,52696	2,85839	0,00425799	0,0487389	yes
UGT2A3 (4 of 4)	groupXIII:17427540-17430821	control	clone I	5,07765	0,317841	-3,99779	3,10914	0,00187631	0,0255049	yes
UGT2A3 (3 of 4)	groupXIII:17432508-17436491	control	clone I	10,2192	2,67312	-1,93469	2,9467	0,00321186	0,0390901	yes
NIPSNAP1	groupXIII:18139725-18145216	control	clone I	19,2274	0,875695	-4,45659	4,11502	3,87E-05	0,00103927	yes
ENSGACG00000014312	groupXIII:18785075-18787210	control	clone I	88,7797	337,298	1,92572	-3,27536	0,00105527	0,0160488	yes
ENSGACG00000014675	groupXIII:19662495-19669124	control	clone I	35,4193	7,40427	-2,25811	3,28513	0,00101936	0,0156029	yes
GRAMD3 (2 of 2)	groupXIII:19874115-19881489	control	clone I	18,647	0	-1,80E+308	-1,80E+308	0,000678638	0,0112038	yes
ENSGACG00000014811	groupXIII:20074137-20082953	control	clone I	107,827	2,36189	-5,51263	4,46164	8,13E-06	0,000278366	yes
ENSGACG00000015778	groupXIV:1050068-1052511	control	clone I	7,4958	0,525978	-3,83301	3,22384	0,00126482	0,0185838	yes
C9	groupXIV:1639733-1643779	control	clone I	141,829	2,39006	-5,89096	4,86402	1,15E-06	5,27E-05	yes
AGXT2 (1 of 2)	groupXIV:3999373-4006176	control	clone I	14,8505	0,445629	-5,05852	4,45612	8,35E-06	0,000284477	yes
AMBP	groupXIV:7780908-7787080	control	clone I	546,887	5,23479	-6,70697	5,08546	3,67E-07	1,98E-05	yes
C6	groupXIV:10371246-10378853	control	clone I	98,9399	6,35633	-3,96029	15,8032	0	0	yes
LYZ	groupXIV:13700783-13704111	control	clone I	507,474	6,15207	-6,36612	5,7449	9,20E-09	8,18E-07	yes
TPM2	groupXIV:14793584-14812370	control	clone I	58,3256	35,937	-0,698659	4,04338	5,27E-05	0,00134639	yes
DMGDH	groupXIV:1039441-1048452	control	clone I	35,6271	1,84404	-4,27203	4,4047	1,06E-05	0,000347971	yes
ENSGACG00000015857	groupXIV:1656998-1659360	control	clone I	423,183	7,31214	-5,85485	5,71822	1,08E-08	9,39E-07	yes
BRIX1	groupXIV:4020461-4025847	control	clone I	42,8255	82,0754	0,938478	-2,95954	0,00308099	0,037834	yes
ENSGACG00000016946	groupXIV:6493199-6494250	control	clone I	3,56563	47,7307	3,74269	-3,99966	6,34E-05	0,00157196	yes
SUSD2	groupXIV:6510960-6517608	control	clone I	9,21498	0,148896	-5,9516	2,98065	0,00287635	0,0358288	yes
PGAM2	groupXIV:8912216-8913964	control	clone I	23,4726	0,889121	-4,72246	4,39078	1,13E-05	0,000367394	yes
C7 (1 of 2)	groupXIV:10379023-10386421	control	clone I	20,5733	1,85433	-3,47181	3,85601	0,000115251	0,0025901	yes
SLC27A6	groupXIV:14021775-14037860	control	clone I	104,489	8,92353	-3,54959	3,6985	0,00021688	0,00438382	yes
LCAT,PLA2G15	groupXIX:3108407-3121706	control	clone I	119,331	35,2933	-1,7575	3,24612	0,0011699	0,0174532	yes
HAL	groupXIX:6242360-6247553	control	clone I	57,4697	1,16135	-5,62892	4,9974	5,81E-07	2,94E-05	yes
ENSGACG00000006351	groupXIX:7669051-7670811	control	clone I	15,5011	0,772357	-4,32696	3,85377	0,000116311	0,00260974	yes
ENSGACG00000006644	groupXIX:7825247-7841880	control	clone I	94,0636	0,525211	-7,4846	6,15492	7,51E-10	9,13E-08	yes
TNNI2 (1 of 5)	groupXIX:9287887-9290073	control	clone I	36,9595	3,34812	-3,46452	3,12026	0,00180689	0,0247394	yes
TNNI2 (3 of 5)	groupXIX:9291924-9297476	control	clone I	72,7765	6,76612	-3,42707	3,7472	0,000178817	0,00373263	yes
ENSGACG00000012381	groupXIX:15731481-15746320	control	clone I	60,9356	1,1026	-5,7883	5,67306	1,40E-08	1,18E-06	yes
MIOX	groupXIX:16666626-16669474	control	clone I	474,137	4,1174	-6,84743	5,05327	4,34E-07	2,29E-05	yes

CETP	groupXIX:1019030-1027090	control	clone I	84,5423	0,609383	-7,11618	6,26608	3,70E-10	4,89E-08	yes
ENSGACG00000002832	groupXIX:2343012-2345777	control	clone I	30,9381	0,598184	-5,69265	3,4174	0,000632226	0,0105763	yes
AKR1D1 (2 of 2)	groupXIX:4625246-4628452	control	clone I	106,482	1,33926	-6,31304	5,93069	3,02E-09	3,10E-07	yes
DENND4A (2 of 2)	groupXIX:6453753-6469506	control	clone I	2,7655	47,0876	4,08973	-6,43452	1,24E-10	1,86E-08	yes
SLC27A2 (2 of 3)	groupXIX:7600647-7605874	control	clone I	53,9314	6,75996	-2,99604	3,35474	0,000794409	0,0127377	yes
PPP1R15B	groupXIX:8013636-8017213	control	clone I	10,4223	33,1697	1,67019	-2,95783	0,00309817	0,0379965	yes
ENSGACG00000011633	groupXIX:14668465-14673539	control	clone I	31,9439	5,9121	-2,4338	2,99645	0,00273144	0,0343844	yes
NR1H4	groupXIX:15000176-15007782	control	clone I	29,7017	0,900799	-5,0432	5,61863	1,92E-08	1,55E-06	yes
ENSGACG00000011846	groupXIX:15110438-15111429	control	clone I	432,416	5,12064	-6,39995	7,07991	1,44E-12	3,47E-10	yes
ENSGACG00000011851	groupXIX:15111527-15129934	control	clone I	382,613	4,0552	-6,55997	10,5766	0	0	yes
PGC	groupXIX:15752173-15755057	control	clone I	1,49367	13,2703	3,15127	-3,3441	0,000825514	0,0131358	yes
ENSGACG00000013996	groupXIX:19940087-19949398	control	clone I	16,8797	0,670552	-4,65379	3,61508	0,000300255	0,00573683	yes
ADSSL1	groupXV:2673297-2677197	control	clone I	22,0206	2,48666	-3,14657	3,64998	0,000262256	0,00513046	yes
ENSGACG00000007329	groupXV:4313004-4316787	control	clone I	270,55	97,3532	-1,4746	4,96273	6,95E-07	3,43E-05	yes
ENSGACG00000007640	groupXV:4787065-4788482	control	clone I	84,4548	2,99436	-4,81786	4,27625	1,90E-05	0,000571725	yes
ENSGACG00000007642	groupXV:4790253-4796567	control	clone I	80,9656	0,85093	-6,57212	4,79305	1,64E-06	7,15E-05	yes
SERPINA10 (1 of 2)	groupXV:5380572-5382577	control	clone I	181,508	1,68212	-6,75361	7,93713	2,00E-15	8,36E-13	yes
ELL (2 of 2)	groupXV:8297534-8304173	control	clone I	6,00553	37,8133	2,65453	-4,04539	5,22E-05	0,00133663	yes
SLC2A2	groupXV:10147689-10155333	control	clone I	13,2943	0	-1,80E+308	-1,80E+308	0,00418103	0,0480541	yes
ENSGACG00000005133	groupXV:1444643-1453495	control	clone I	47,8789	23,6791	-1,01577	3,22318	0,00126775	0,0186172	yes
THBS1 (2 of 2)	groupXV:2296799-2303009	control	clone I	5,34663	41,8024	2,96688	-4,56442	5,01E-06	0,000184648	yes
QPCT	groupXV:3702226-3707282	control	clone I	23,1847	1,54089	-3,91134	3,73513	0,00018762	0,00388518	yes
GSTZ1	groupXV:4856329-4857793	control	clone I	39,6961	4,83307	-3,03798	3,09735	0,00195257	0,026323	yes
ACMSD	groupXVI:4108198-4112993	control	clone I	58,21	0,654498	-6,47473	4,43204	9,33E-06	0,000312622	yes
IGFBP2 (2 of 2)	groupXVI:5906186-5912186	control	clone I	13,3543	0,6515	-4,3574	2,90323	0,00369335	0,0436332	yes
ILDR1 (1 of 2)	groupXVI:7575142-7581994	control	clone I	15,9083	0,470008	-5,08095	4,57569	4,75E-06	0,00017641	yes
ENSGACG00000005482	groupXVI:10707621-10709196	control	clone I	32,1005	7,20026	-2,15647	2,88174	0,0039549	0,0460253	yes
MYL1	groupXVI:12804558-12809401	control	clone I	63,654	3,56941	-4,15649	4,29378	1,76E-05	0,000534414	yes
HNMT (2 of 2)	groupXVI:14288130-14290745	control	clone I	140,647	20,3489	-2,78906	3,24465	0,00117596	0,0175251	yes
ENSGACG00000007337	groupXVI:14344973-14348217	control	clone I	66,692	7,88015	-3,08122	3,49024	0,000482589	0,00848312	yes
FRZB	groupXVI:16050496-16058935	control	clone I	35,4299	10,383	-1,77075	3,46421	0,000531798	0,00918551	yes
ENSGACG00000001548	groupXVI:1606062-1610800	control	clone I	19,6502	70,7863	1,84892	-3,34222	0,0008311	0,0132074	yes
ENSGACG00000005264	groupXVI:10507461-10514195	control	clone I	37,5172	0,391003	-6,58423	3,38328	0,000716258	0,0117097	yes
UPP2	groupXVI:11169073-11170928	control	clone I	135,155	3,24694	-5,37939	4,48565	7,27E-06	0,000253128	yes
F5	groupXVI:17927939-17939340	control	clone I	43,205	0,676411	-5,99715	5,02372	5,07E-07	2,61E-05	yes
PPM1J	groupXVII:3666387-3676360	control	clone I	29,2041	77,9384	1,41616	-3,17173	0,00151534	0,0214775	yes
CYP24A1	groupXVII:3843198-3847380	control	clone I	219,445	4,68869	-5,54853	8,43503	0	0	yes
CELA1 (1 of 2)	groupXVII:4113562-4116634	control	clone I	13,4619	1,28765	-3,38608	2,92097	0,00348941	0,0417143	yes
SOAT2	groupXVII:5460811-5469767	control	clone I	31,0517	3,9413	-2,97793	3,90541	9,41E-05	0,00218518	yes
ENSGACG00000009188	groupXVII:8810501-8815093	control	clone I	3,93179	19,588	2,31671	-3,18624	0,00144135	0,0206325	yes
ENSGACG00000009200	groupXVII:8817602-8822247	control	clone I	4,25078	24,2117	2,50991	-4,44337	8,86E-06	0,000299218	yes
ENSGACG00000009583	groupXVII:9731456-9734766	control	clone I	37,2941	0,724762	-5,6853	4,82374	1,41E-06	6,26E-05	yes
ENSGACG00000009592	groupXVII:9737213-9738973	control	clone I	145,57	2,07824	-6,1302	6,69448	2,16E-11	3,93E-09	yes
ENSGACG00000010478	groupXVII:10724718-10741442	control	clone I	21,1269	9,01259	-1,22907	4,54562	5,48E-06	0,000199077	yes
G0S2	groupXVII:12665596-12666123	control	clone I	154,314	2,5631	-5,91183	4,99037	6,03E-07	3,03E-05	yes
ENSGACG00000005023	groupXVII:3249923-3258158	control	clone I	15,2506	0,394136	-5,27403	3,92559	8,65E-05	0,00203782	yes
ZNFX1	groupXVII:4531154-4544248	control	clone I	6,69213	18,1483	1,4393	-3,07339	0,00211641	0,0280832	yes
ALDH1L1	groupXVII:12102049-12111544	control	clone I	25,5644	1,74773	-3,87058	3,99461	6,48E-05	0,00160033	yes
ENSGACG00000011676	groupXVII:13185594-13190366	control	clone I	11,9876	42,33	1,82014	-3,08581	0,00203001	0,0271622	yes
CYP46A1	groupXVIII:2537070-2565520	control	clone I	69,4442	22,9854	-1,59514	3,79496	0,000147666	0,00318336	yes
PLG	groupXVIII:3113722-3122456	control	clone I	216,823	2,54515	-6,41262	8,41055	0	0	yes
ENSGACG00000006829	groupXVIII:5439706-5440561	control	clone I	73,2276	1,5468	-5,56502	5,28938	1,23E-07	7,73E-06	yes
ENSGACG00000006833	groupXVIII:5443127-5444747	control	clone I	53,0978	0	-1,80E+308	-1,80E+308	0,000126401	0,00279651	yes
LRG1	groupXVIII:9292141-9294935	control	clone I	72,6284	1,60911	-5,4962	5,22648	1,73E-07	1,04E-05	yes
APOB (5 of 5)	groupXVIII:9330964-9346541	control	clone I	397,857	2,52703	-7,29866	7,87156	3,55E-15	1,43E-12	yes
APOB (1 of 5)	groupXVIII:9364878-9366348	control	clone I	142,41	1,13425	-6,97217	6,68895	2,25E-11	4,07E-09	yes
IYD	groupXVIII:11202174-11205243	control	clone I	13,5345	1,15507	-3,55059	3,22459	0,00126153	0,0185457	yes
SLC22A16	groupXVIII:11846807-11852323	control	clone I	17,5664	0,209871	-6,38717	3,20753	0,0013388	0,0194484	yes
ENSGACG00000013449	groupXVIII:15749136-15756286	control	clone I	10,4827	0,756411	-3,7927	3,45814	0,000543925	0,00935562	yes
ENSGACG00000013769	groupXVIII:16170571-16176437	control	clone I	17,6243	0,180009	-6,61335	3,73859	0,000185053	0,00384112	yes
ENSGACG00000010476	groupXVIII:10338804-10341156	control	clone I	1,60684	32,4036	4,33386	-5,80928	6,27E-09	5,86E-07	yes
ALDH8A1	groupXVIII:11082283-11085044	control	clone I	54,0471	0,675786	-6,32151	4,8986	9,65E-07	4,54E-05	yes
ENSGACG00000011882	groupXVIII:12563265-12564805	control	clone I	17,522	0,890428	-4,29853	2,91898	0,00351179	0,0419258	yes
C6orf58	groupXVIII:15059227-15061479	control	clone I	111,847	2,00818	-5,7995	5,86065	4,61E-09	4,49E-07	yes
ENSGACG00000003030	groupXX:279325-280477	control	clone I	50,9171	0,928614	-5,77693	4,13477	3,55E-05	0,000967877	yes
ENSGACG00000003461	groupXX:754241-755023	control	clone I	2974,3	36,1844	-6,36104	4,7158	2,41E-06	9,90E-05	yes
ENSGACG00000003467	groupXX:759235-760746	control	clone I	11578,4	87,0044	-7,05614	3,4627	0,000534784	0,00922841	yes
ENSGACG00000003473	groupXX:762706-763550	control	clone I	397,148	4,91197	-6,33723	4,95348	7,29E-07	3,57E-05	yes
DPYS	groupXX:2879790-2889333	control	clone I	17,7264	0,554371	-4,99891	4,11414	3,89E-05	0,00104265	yes
HPN	groupXX:5115717-5118798	control	clone I	15,9595	0,434453	-5,19908	3,82259	0,000132058	0,00289982	yes
NCOA7 (2 of 2)	groupXX:5442148-5444002	control	clone I	16,9132	91,5327	2,43613	-3,47908	0,000503136	0,00877779	yes
CROT (2 of 2)	groupXX:10855977-10863256	control	clone I	24,6045	10,1067	-1,28362	4,84789	1,25E-06	5,65E-05	yes
ENSGACG00000012464	groupXX:13746909-13747781	control	clone I	12,0529	232,877	4,27211	-5,23745	1,63E-07	9,85E-06	yes
CNDP1	groupXX:2073451-2081405	control	clone I	39,708	0,25528	-7,2812	3,10953	0,00187385	0,0254777	yes
ENSGACG00000007038	groupXX:7875940-7881458	control	clone I	80,2886	0,457291	-7,45594	3,72387	0,000196193	0,00403245	yes
NR0B2	groupXX:8131362-8132271	control	clone I	22,4858	0	-1,80E+308	-1,80E+308	0,00178359	0,0244808	yes
ABCB4	groupXX:10864559-10876110	control	clone I	29,6888	0,234929	-6,98155	5,18274	2,19E-07	1,27E-05	yes
GAPDH (2 of 2)	groupXX:11781412-11785564	control	clone I	504,309	6,26794	-6,33017	5,91368	3,35E-09	3,39E-07	yes
PKLR	groupXX:12620831-12630510	control	clone I	10,0268	2,38317	-2,07291	3,18375	0,0014538	0,020775	yes
ENSGACG00000012473	groupXX:13875775-13876264	control	clone I	103,197	13,2353	-2,96294	2,96289	0,00304768	0,0375179	yes
PDIA4	groupXXI:5734018-5738065	control	clone I	24,0489	48,1773	1,00239	-2,93055	0,00338362	0,0407297	yes
PRHOXNB	groupXXI:7564025-7564669	control	clone I	97,3277	1,08533	-6,48664	4,69215	2,70E-06	0,000109325	yes
SLC22A13	groupXXI:8131606-8134827	control	clone I	7,87499	0,215097	-5,19422	3,26534	0,00109333	0,016519	yes
CSRNP1 (1 of 2)	groupXXI:8204340-8207525	control	clone I	4,148	23,7578	2,51791	-3,19575	0,00139468	0,0200985	yes
ABCF2	groupXXI:10006210-10011276	control	clone I	25,6315	86,4485	1,75392	-3,30907	0,000936081	0,0145583	yes
C8G	groupXXI:5566442-5569736	control	clone I	564,245	4,5427	-6,95663	6,08602	1,16E-09	1,34E-07	yes
HGD	groupXXI:5895781-5903328	control	clone I	30,7561	0,46214	-6,0564	4,55514	5,24E-06	0,000191702	yes
ENSGACG00000014852	scaffold_1014:540-2461	control	clone I	56,6342	2,57792	-4,45739	4,04776	5,17E-05	0,0013255	yes
ASGR1	scaffold_129:65701-71714	control	clone I	158,575	1,67779	-6,56246	5,52556	3,28E-08	2,47E-06	yes
TFR2	scaffold_129:135237-139395	control	clone I	7,74808	0,707518	-3,453	3,21178	0,00131914	0,0192224	yes
SLC13A5 (2 of 2)	scaffold_132:188482-197401	control	clone I	59,9029	0,849427	-6,13999	5,69695	1,22E-08	1,05E-06	yes
PROC	scaffold_135:36317-39014	control	clone I	52,1754	1,9043	-4,77604	5,20197	1,97E-07	1,16E-05	yes
ENSGACG00000017758	scaffold_137:194756-195795	control	clone I	0,712969	32,0601	5,49079	-3,06092	0,0022066	0,029023	yes
TYMP	scaffold_152:16045-20928	control	clone I	50,6855	1,68005	-4,915	4,79396	1,64E-06	7,12E-05	yes
TAT	scaffold_163:104982-110801	control	clone I	89,3102	1,81298	-5,62239	5,58991	2,27E-08	1,79E-06	yes
EGFR (2 of 2)	scaffold_182:13637-23312	control	clone I	12,4591	1,61848	-2,9445	3,43908	0,000583696	0,00990652	yes
GAPDH (1 of 2)	scaffold_208:92360-97479	control	clone I	102,905	10,9058	-3,23816	6,21181	5,24E-10	6,64E-08	yes
SLC22A14	scaffold_210:56746-62418	control	clone I	12,8704	1,15026	-3,48402	3,32523	0,000883453	0,0138823	yes
ENSGACG00000001261	scaffold_224:14139-22088	control	clone I	29,7889	1,49549	-4,31609	4,10537	4,04E-05	0,00107651	yes
ENSGACG00000001736	scaffold_232:280-4420	control	clone I	15,9236	2,43078	-2,71167	2,93061	0,00338299	0,0407239	yes
ENSGACG00000001742	scaffold_232:44158-79908	control	clone I	59,1722	8,092	-2,87035	8,95839	0	0	yes
C3 (7 of 8)	scaffold_232:167843-171745	control	clone I	25,5542	3,86762	-2,72404	3,16051	0,00157496	0,0221546	yes
C3 (8 of 8)	scaffold_251:15264-34678	control	clone I	24,4008	2,94383	-3,05116	11,69	0	0	yes
ENSGACG00000000614	scaffold_27:1359322-1367941	control	clone I	7,10486	13,2012	0,893794	-2,88451	0,00392023	0,0457139	yes
ENSGACG00000000665	scaffold_27:1704181-1705739	control	clone I	24,0092	2,09472	-3,51876	3,50375	0,000458751	0,00813988	yes
SLC25A34	scaffold_27:3240261-3248556	control	clone I	8,40527	0,847894	-3,30934	3,01074	0,00260614	0,0331358	yes
HYAL2 (1 of 2)	scaffold_27:3603786-3610736	control	clone I	14,5824	32,8338	1,17095	-2,98757	0,00281202	0,0351816	yes
MST1P9	scaffold_27:3770786-3781105	control	clone I	57,3718	0,501607	-6,83764	5,18914	2,11E-07	1,23E-05	yes

PFKM (2 of 2)	scaffold_27:1780298-1786604	control	clone I	16,1929	0,722596	-4,48603	4,41896	9,92E-06	0,000329235	yes
UROC1	scaffold_27:2259743-2266069	control	clone I	56,0871	1,70649	-5,03856	5,08932	3,59E-07	1,94E-05	yes
FKBP5	scaffold_27:4190407-4197823	control	clone I	16,0105	155,126	3,27635	-5,30202	1,15E-07	7,28E-06	yes
ITIH4 (2 of 2)	scaffold_27:4635810-4639569	control	clone I	704,296	11,2468	-5,96859	4,11775	3,83E-05	0,00102914	yes
ENSGACG00000001260	scaffold_332:1942-12505	control	clone I	319,286	3,67773	-6,43989	4,73807	2,16E-06	9,02E-05	yes
C3 (1 of 8)	scaffold_332:23002-24274	control	clone I	253,781	2,14946	-6,88346	5,29805	1,17E-07	7,41E-06	yes
C3 (2 of 8)	scaffold_332:25355-28790	control	clone I	100,881	2,30492	-5,45179	4,92365	8,49E-07	4,07E-05	yes
ENSGACG00000000231	scaffold_363:6365-16886	control	clone I	6,1495	0,315208	-4,28609	3,92053	8,84E-05	0,00207364	yes
ENSGACG00000001733	scaffold_609:4313-11347	control	clone I	387,005	2,88867	-7,0658	6,86878	6,48E-12	1,34E-09	yes
ALLC	scaffold_670:4194-8968	control	clone I	35,2693	1,24827	-4,82042	4,85961	1,18E-06	5,37E-05	yes
ENSGACG00000000272	scaffold_69:195180-196587	control	clone I	14,3081	1,01784	-3,81325	3,61718	0,000297829	0,00569912	yes
CASQ1 (1 of 2)	scaffold_713:7518-10179	control	clone I	20,5969	0,53228	-5,2741	3,65749	0,000254702	0,00500872	yes
ATP7B	scaffold_74:232711-239646	control	clone I	9,66025	0,151184	-5,99769	3,28491	0,00102015	0,0156127	yes
ENSGACG00000000007	scaffold_89:26629-27862	control	clone I	123,034	0,892176	-7,10752	5,61391	1,98E-08	1,59E-06	yes
EPS8	scaffold_90:181816-196703	control	clone I	5,62855	1,14029	-2,30336	3,37236	0,000745276	0,0120925	yes
ENSGACG00000001432	scaffold_908:2132-5789	control	clone I	818,086	3,13011	-8,0299	6,93316	4,12E-12	8,94E-10	yes
F3 (1 of 2)	scaffold_95:201021-206943	control	clone I	2,33133	20,0247	3,10255	-3,80198	0,000143546	0,00310933	yes
COX7A1	groupI:746198-747195	control	clone mix	34,9527	259,582	2,89271	-3,14181	0,00167906	0,0233233	yes
MPZL3	groupI:2301707-2308184	control	clone mix	20,6773	1,38496	-3,90013	3,37103	0,000748888	0,0121397	yes
ENSGACG00000006790	groupI:4118508-4121716	control	clone mix	26,7257	1,2251	-4,44725	4,08243	4,46E-05	0,00117029	yes
SGCG	groupI:4128095-4137512	control	clone mix	6,89238	26,5571	1,94602	-2,89446	0,00379814	0,0445955	yes
IGSF5 (2 of 2)	groupI:4236564-4248993	control	clone mix	11,5596	0,419673	-4,78368	3,329	0,000871581	0,0137298	yes
ENSGACG00000009173	groupI:8598219-8599405	control	clone mix	302,713	0,471193	-9,32742	4,80176	1,57E-06	6,89E-05	yes
DIABLO (1 of 2)	groupI:12409077-12411083	control	clone mix	184,466	0,46375	-8,63579	5,42268	5,87E-08	4,08E-06	yes
XIRP2 (1 of 2)	groupI:20491287-20509048	control	clone mix	0,545556	6,80076	3,63989	-3,95942	7,51E-05	0,00181064	yes
KBTBD10 (1 of 2)	groupI:20640583-20644716	control	clone mix	2,48134	37,7373	3,9268	-3,837	0,000124546	0,00276196	yes
HPX	groupI:20820541-20824484	control	clone mix	398,204	0,802277	-8,95519	7,1417	9,22E-13	2,31E-10	yes
SPEG (2 of 2)	groupI:21630257-21663404	control	clone mix	0,838689	5,55805	2,72837	-3,23453	0,00121844	0,0180301	yes
ENSGACG00000014752	groupI:22723989-22724814	control	clone mix	73,7738	1415,66	4,26222	-3,58549	0,000336452	0,00630562	yes
DMD	groupI:25729704-25866306	control	clone mix	0,594704	5,99977	3,33467	-3,67784	0,000235213	0,00468941	yes
F2	groupI:27446959-27451949	control	clone mix	300,719	2,17808	-7,10922	4,57973	4,66E-06	0,000173562	yes
ENSGACG00000015464	groupI:27507091-27513914	control	clone mix	87,4185	0,392757	-7,79816	5,95355	2,62E-09	2,74E-07	yes
ENSGACG00000015472	groupI:27514140-27518203	control	clone mix	138,882	0,463776	-8,22622	5,47421	4,39E-08	3,17E-06	yes
F10	groupI:27519217-27524787	control	clone mix	95,2491	0,466804	-7,67275	5,48701	4,09E-08	2,98E-06	yes
PROZ (2 of 2)	groupI:27525490-27526891	control	clone mix	101,777	0,348985	-8,18804	4,2316	2,32E-05	0,000676432	yes
ENSGACG00000004413	groupI:65278-68049	control	clone mix	461,416	0,619303	-9,54121	6,82082	9,05E-12	1,81E-09	yes
ENSGACG00000004822	groupI:514071-517686	control	clone mix	32,7467	1,68245	-4,28271	3,34954	0,000809453	0,0129317	yes
USP2	groupI:825334-835930	control	clone mix	1,73185	22,3637	3,69078	-3,78322	0,000154815	0,00331004	yes
CFB	groupI:2156319-2166868	control	clone mix	76,4034	2,06039	-5,21265	4,38593	1,15E-05	0,000374249	yes
APOA1	groupI:2218129-2220146	control	clone mix	7751,65	14,5024	-9,06207	4,21406	2,51E-05	0,000722663	yes
VTN (2 of 2)	groupI:7562562-7566990	control	clone mix	52,3546	2,73782	-4,25722	5,75123	8,86E-09	7,92E-07	yes
MLF1	groupI:8668668-8674810	control	clone mix	0,781018	21,7563	4,79993	-2,85732	0,00427236	0,0488688	yes
SLC1A5	groupI:9146858-9153860	control	clone mix	9,29285	68,2247	2,8761	-3,79753	0,000146143	0,00315609	yes
SERPINF2	groupI:11927309-11930245	control	clone mix	93,4635	0,409874	-7,83308	5,56731	2,59E-08	2,01E-06	yes
ENSGACG00000012590	groupI:16094777-16096616	control	clone mix	2,75754	34,1196	3,62915	-3,4605	0,000539175	0,00928892	yes
ENSGACG00000012592	groupI:16097382-16106309	control	clone mix	1,359	12,2607	3,17343	-3,33295	0,000859312	0,0135726	yes
CYP2C9	groupI:16588423-16592719	control	clone mix	511,423	5,27448	-6,59934	3,75529	0,000173139	0,00363377	yes
RYR1 (1 of 2)	groupI:16633943-16692160	control	clone mix	0,329757	7,14389	4,43723	-4,27817	1,88E-05	0,000567537	yes
ENSGACG00000013712	groupI:19969806-19974985	control	clone mix	5,23046	14,4244	1,4635	-2,90781	0,00363968	0,043131	yes
ABCB11	groupI:20584817-20596751	control	clone mix	43,5289	0,295882	-7,20081	4,8769	1,08E-06	4,99E-05	yes
GPM6B (2 of 2)	groupI:22269224-22284819	control	clone mix	14,2643	40,0413	1,48908	-3,19525	0,00139709	0,0201277	yes
RAMP1 (2 of 2)	groupI:22543147-22546037	control	clone mix	2,05393	45,1035	4,45678	-3,04966	0,00229099	0,0299031	yes
CLIC5 (2 of 2)	groupI:23417963-23421195	control	clone mix	1,12299	19,7114	4,13361	-3,37773	0,00073087	0,0119035	yes
SPP2	groupI:25542617-25544016	control	clone mix	50,2742	0,637666	-6,30087	3,71591	0,000202476	0,00413994	yes
ENSGACG00000015411	groupI:27359084-27364279	control	clone mix	132,116	0,194702	-9,40632	4,21198	2,53E-05	0,000728333	yes
PCSK6	groupII:3557485-3572495	control	clone mix	7,29586	0,196944	-5,21122	3,83884	0,000123615	0,00274499	yes
ENSGACG00000014922	groupII:5627137-5632419	control	clone mix	14,4191	273,147	4,24362	-4,22689	2,37E-05	0,000688445	yes
ADPRHL1	groupII:7768909-7772963	control	clone mix	0,339998	38,9887	6,84139	-4,82712	1,39E-06	6,17E-05	yes
RRAD	groupII:8210016-8212357	control	clone mix	2,13092	29,8949	3,81035	-3,22917	0,0012415	0,0183088	yes
CDH15	groupII:8468768-8479404	control	clone mix	0,410623	7,74803	4,23794	-3,40261	0,000667444	0,0110521	yes
ENSGACG00000016045	groupII:12989829-13015641	control	clone mix	1,3807	62,7757	5,50674	-4,53889	5,66E-06	0,000204499	yes
ENSGACG00000016298	groupII:14551247-14569051	control	clone mix	21,2148	124,818	2,55669	-4,06965	4,71E-05	0,00122545	yes
SLC27A2 (1 of 3)	groupII:5785622-5789071	control	clone mix	14,2102	0,608384	-4,5458	3,81963	0,000133652	0,00292919	yes
FSD2	groupII:5862924-5867431	control	clone mix	8,25737	48,5869	2,55681	-2,91409	0,00356731	0,0424511	yes
MICAL2 (2 of 2)	groupII:10451835-10467359	control	clone mix	6,82115	33,3331	2,28887	-2,86326	0,00419306	0,0481628	yes
LIPC	groupII:11310522-11317108	control	clone mix	46,3473	0,636499	-6,18618	5,71948	1,07E-08	9,33E-07	yes
ALPK3 (1 of 2)	groupII:15268483-15277781	control	clone mix	0,155975	8,20619	5,71732	-3,92089	8,82E-05	0,00207101	yes
CSRP3	groupII:19781207-19783294	control	clone mix	0,554312	57,0264	6,68479	-3,36358	0,000769387	0,0124122	yes
TNNT3 (2 of 2)	groupII:21934735-21940961	control	clone mix	21,9067	205,472	3,2295	-3,76381	0,000167344	0,00353286	yes
ENSGACG00000012663	groupIII:205052-212076	control	clone mix	0,272941	6,5965	4,59504	-4,05004	5,12E-05	0,0013149	yes
IGFBP1 (2 of 2)	groupIII:599860-601840	control	clone mix	88,5685	0,921452	-6,58674	4,785	1,71E-06	7,39E-05	yes
ENSGACG00000014348	groupIII:3914290-3917139	control	clone mix	118,266	2,36632	-5,64324	4,34963	1,36E-05	0,000430949	yes
CYP7A1	groupIII:5080002-5084046	control	clone mix	74,8458	3,69887	-4,33877	6,12225	9,23E-10	1,10E-07	yes
ENSGACG00000014948	groupIII:6319454-6331292	control	clone mix	2,04712	592,973	8,17823	-2,96101	0,00306636	0,0376933	yes
ENSGACG00000014960	groupIII:6336030-6349511	control	clone mix	0,194248	85,2673	8,77795	-5,76743	8,05E-09	7,29E-07	yes
PIP5K1C (2 of 2)	groupIII:7710662-7721459	control	clone mix	0,832627	10,2316	3,61921	-3,39255	0,000692464	0,0113909	yes
ENSGACG00000016031	groupIII:9201467-9205797	control	clone mix	1,00682	13,1258	3,70453	-3,55232	0,000381856	0,0070004	yes
ANGPTL3 (1 of 2)	groupIII:9794900-9798464	control	clone mix	16,4538	0,282094	-5,8661	4,22589	2,38E-05	0,000691078	yes
C8B	groupIII:10056597-10062502	control	clone mix	189,341	0,246136	-9,58731	4,52789	5,96E-06	0,000213696	yes
CYP8B1	groupIII:13910746-13912276	control	clone mix	174,42	6,21105	-4,81158	3,87657	0,000105939	0,00241293	yes
ENSGACG00000017683	groupIII:15239340-15268451	control	clone mix	3,45529	90,824	4,7162	-4,47089	7,79E-06	0,000268433	yes
DTNA	groupIII:16328727-16338096	control	clone mix	0,533268	15,7156	4,88119	-4,20953	2,56E-05	0,000735057	yes
TF	groupIII:1601833-1608377	control	clone mix	519,092	2,98589	-7,44169	3,50225	0,000461348	0,00817794	yes
AGXT (1 of 2)	groupIII:1651825-1658273	control	clone mix	501,244	1,40009	-8,48385	4,19107	2,78E-05	0,000786698	yes
ARL14 (2 of 2)	groupIII:2130943-2132187	control	clone mix	50,9696	0	-1,80E+308	-1,80E+308	0,000483262	0,00849264	yes
JPH1 (1 of 2)	groupIII:5492872-5511396	control	clone mix	1,38216	30,1295	4,44618	-4,02862	5,61E-05	0,0014192	yes
ENSGACG00000015168	groupIII:7062852-7089306	control	clone mix	0,954739	27,3508	4,84033	-4,45722	8,30E-06	0,000283264	yes
ENSGACG00000015265	groupIII:7332323-7334769	control	clone mix	3,7388	85,3648	4,51299	-4,0253	5,69E-05	0,00143615	yes
ENSGACG00000015407	groupIII:7944620-7952578	control	clone mix	2,08142	17,8778	3,10252	-3,07739	0,0020882	0,0277831	yes
ATP1B3	groupIII:9036494-9039868	control	clone mix	3,11375	55,4923	4,15556	-3,84068	0,000122693	0,00272753	yes
AHSG	groupIII:9378474-9381561	control	clone mix	760,048	1,0671	-9,47625	9,50905	0	0	yes
ENSGACG00000016104	groupIII:9402020-9405305	control	clone mix	389,573	0,358892	-10,0841	5,82296	5,78E-09	5,46E-07	yes
IPO13 (2 of 2)	groupIII:9867147-9874001	control	clone mix	0,471194	6,57361	3,80229	-3,06973	0,00214249	0,0283576	yes
MYOC	groupIII:9940522-9942567	control	clone mix	0,570091	20,376	5,15953	-3,38355	0,00071554	0,0117003	yes
C8A	groupIII:10062735-10068969	control	clone mix	107,029	0,371097	-8,172	5,08905	3,60E-07	1,95E-05	yes
MYLK4 (2 of 2)	groupIII:10620516-10623791	control	clone mix	1,90815	38,4876	4,33414	-4,2695	1,96E-05	0,00058648	yes
MYOM1 (2 of 2)	groupIII:12926418-12939638	control	clone mix	3,46346	73,1071	4,39973	-5,56071	2,69E-08	2,07E-06	yes
OBSCN	groupIII:14055165-14092796	control	clone mix	0,908085	17,4935	4,26785	-5,94493	2,77E-09	2,87E-07	yes
ENSGACG00000017655	groupIII:15101195-15104255	control	clone mix	16,3825	0,818531	-4,32298	3,08042	0,00206708	0,0275538	yes
SVIL (2 of 2)	groupIII:15105494-15128520	control	clone mix	1,35415	10,5335	2,95952	-3,40445	0,000662983	0,0109918	yes
FOSL1	groupIV:5471462-5474199	control	clone mix	0,765935	21,0091	4,77764	-3,79049	0,000150351	0,00323166	yes
ANXA6	groupIV:13375788-13385299	control	clone mix	1,40423	26,3077	4,22764	-4,01743	5,88E-05	0,00147707	yes
ACSL4	groupIV:15052252-15058258	control	clone mix	14,7063	34,0703	1,21208	-3,22907	0,00124195	0,0183141	yes
ENSGACG00000019066	groupIV:21221531-21246568	control	clone mix	135,535	0,242947	-9,12381	6,1149	9,66E-10	1,14E-07	yes
PFKFB3	groupIV:22147683-22153447	control	clone mix	3,48231	37,298	3,42098	-4,08144	4,48E-05	0,00117453	yes
ENSGACG00000019604	groupIV:26375263-26387285	control	clone mix	24,7455	0	-1,80E+308	-1,80E+308	1,01E-07	6,52E-06	yes
ENSGACG00000019624	groupIV:27588233-27596540	control	clone mix	0,882132	17,713	4,32767	-3,1973	0,00138722	0,0200102	yes
ENSGACG00000019744	groupIV:29692169-29694681	control	clone mix	1,68518	341,468	7,66271	-5,42864	5,68E-08	3,96E-06	yes
ITIH2	groupIV:32581141-32590002	control	clone mix	121,681	0,322039	-8,56165	5,38754	7,14E-08	4,84E-06	yes
EGF	groupIV:1976198-1985566	control	clone mix	0,698579	5,75479	3,04227	-3,02706	0,00246946	0,0317477	yes
ASB5	groupIV:2023660-2028057	control	clone mix	0,291792	14,2836	5,61327	-3,11678	0,00182838	0,0249823	yes

TDO2	groupIV:2044919-2048363	control	clone mix	318,447	0,943687	-8,39853	5,11589	3,12E-07	1,72E-05	yes
SLC25A43	groupIV:5559504-5568467	control	clone mix	52,8035	1634,24	4,95184	-4,3554	1,33E-05	0,000421351	yes
F9 (1 of 2)	groupIV:5886033-5889741	control	clone mix	20,2907	0,36846	-5,78317	3,25573	0,00113102	0,016982	yes
FHL1 (1 of 2)	groupIV:6211431-6220387	control	clone mix	10,6395	100,7	3,24257	-5,92215	3,18E-09	3,24E-07	yes
ENSGACG00000017681	groupIV:8369910-8376071	control	clone mix	56,7715	0,786959	-6,17273	4,65409	3,25E-06	0,000128022	yes
MYOZ3	groupIV:11001490-11005265	control	clone mix	1,01758	14,9603	3,87792	-2,90398	0,00368452	0,0435503	yes
PDLIM7	groupIV:13220800-13251404	control	clone mix	9,16492	43,0302	2,23115	-3,53175	0,000412819	0,00746505	yes
ENSGACG00000018662	groupIV:16111937-16112913	control	clone mix	2,14062	48,4941	4,50171	-3,92752	8,58E-05	0,00202406	yes
ENSGACG00000019517	groupIV:25729864-25732188	control	clone mix	42,0835	0	-1,80E+308	-1,80E+308	0,00305528	0,0375886	yes
GZMM (2 of 5)	groupIV:27227060-27229334	control	clone mix	285,553	77,247	-1,88621	5,61969	1,91E-08	1,55E-06	yes
ENSGACG00000020047	groupIV:32137225-32150243	control	clone mix	119,3	0,624305	-7,57813	5,68918	1,28E-08	1,09E-06	yes
AMDHD1	groupIV:32240949-32243596	control	clone mix	21,6556	0,706776	-4,93734	3,73664	0,000186495	0,0038655	yes
ENSGACG00000015947	groupIX:536210-537286	control	clone mix	319,541	1,28285	-7,9605	5,20142	1,98E-07	1,17E-05	yes
ENSGACG00000016073	groupIX:1334638-1357056	control	clone mix	7,53708	66,7307	3,14627	-3,08209	0,0020555	0,0274327	yes
ENSGACG00000016696	groupIX:4874659-4879492	control	clone mix	27,1214	0,270844	-6,64583	4,24364	2,20E-05	0,000646483	yes
TLR3	groupIX:5558989-5568796	control	clone mix	87,3861	5,21789	-4,06587	4,07257	4,65E-05	0,00121238	yes
LIMCH1 (2 of 2)	groupIX:6068560-6084066	control	clone mix	1,07552	7,9866	2,89254	-2,84843	0,00439358	0,0499249	yes
UCP1	groupIX:7336538-7339192	control	clone mix	80,5267	0,37524	-7,74551	5,31126	1,09E-07	6,97E-06	yes
CCRN4L (2 of 2)	groupIX:12301294-12303829	control	clone mix	10,6402	38,8312	1,86769	-3,28045	0,00103641	0,0158156	yes
CACNG1 (2 of 2)	groupIX:12926488-12933270	control	clone mix	0,773754	22,5907	4,86771	-3,2582	0,00112121	0,0168613	yes
TMOD1	groupIX:13575830-13590604	control	clone mix	1,30667	16,3607	3,64627	-3,05382	0,00225948	0,029573	yes
C3 (5 of 8)	groupIX:14166950-14195682	control	clone mix	131,06	0,811535	-7,33536	4,94654	7,55E-07	3,68E-05	yes
ENSGACG00000018776	groupIX:14423040-14427535	control	clone mix	177,355	0,597727	-8,21294	6,44869	1,13E-10	1,71E-08	yes
JUNB (2 of 2)	groupIX:15395448-15396453	control	clone mix	4,48677	47,7688	3,41232	-3,68363	0,000229937	0,00460136	yes
PGLYRP2 (2 of 2)	groupIX:16505862-16507955	control	clone mix	302,534	0,491203	-9,26656	4,57315	4,80E-06	0,000178235	yes
ENSGACG00000019454	groupIX:17624636-17627363	control	clone mix	45,423	0,769882	-5,88264	4,37826	1,20E-05	0,000385487	yes
ENSGACG00000019784	groupIX:19509273-19526089	control	clone mix	0,837529	66,3176	6,30711	-5,06351	4,12E-07	2,18E-05	yes
SLC8A1 (2 of 2)	groupIX:19919460-19931018	control	clone mix	0,248414	61,3334	7,94778	-4,01644	5,91E-05	0,00148222	yes
ENSGACG00000016093	groupIX:1416676-1419531	control	clone mix	75,4932	1,50614	-5,64742	4,03392	5,49E-05	0,00139269	yes
ENSGACG00000016669	groupIX:4852740-4874111	control	clone mix	106,17	3,36202	-4,98091	6,47818	9,28E-11	1,44E-08	yes
ENSGACG00000016687	groupIX:4852740-4874111	control	clone mix	52,5163	1,7303	-4,92367	4,068	4,74E-05	0,00123278	yes
FGG	groupIX:5484649-5487425	control	clone mix	691,321	1,63259	-8,72605	5,19868	2,01E-07	1,18E-05	yes
SORBS2	groupIX:5510578-5528882	control	clone mix	0,981881	21,6185	4,46058	-3,59426	0,000325318	0,00613056	yes
ARHGEF38 (1 of 2)	groupIX:8216878-8222294	control	clone mix	6,71846	0,245399	-4,77493	3,45865	0,000542882	0,00934037	yes
SMOX	groupIX:8508224-8518163	control	clone mix	10,698	369,534	5,1103	-5,42641	5,75E-08	4,00E-06	yes
MYOZ2 (1 of 2)	groupIX:8678716-8682685	control	clone mix	1,47506	86,6969	5,87713	-5,03226	4,85E-07	2,51E-05	yes
SERPING1	groupIX:9801276-9804719	control	clone mix	265,943	17,0305	-3,96492	3,12407	0,0017837	0,0244818	yes
PLA2G12B (1 of 2)	groupIX:10171913-10174516	control	clone mix	20,388	0,846108	-4,59073	3,57706	0,000347477	0,00647535	yes
QPRT	groupIX:10183493-10196687	control	clone mix	16,83	1,29983	-3,69464	2,91718	0,0035321	0,042121	yes
APOH (2 of 2)	groupIX:12782663-12786527	control	clone mix	72,1892	0,786005	-6,5211	4,23846	2,25E-05	0,000659304	yes
SRL (2 of 2)	groupIX:14383728-14389580	control	clone mix	2,62405	23,7725	3,17943	-3,58546	0,000336483	0,00630598	yes
ENSGACG00000018832	groupIX:14579269-14584731	control	clone mix	0,6995	14,6383	4,38728	-3,67079	0,000241803	0,00479694	yes
C3 (3 of 8)	groupIX:14623792-14644206	control	clone mix	159,784	0,846626	-7,56018	4,99894	5,76E-07	2,92E-05	yes
C3 (4 of 8)	groupIX:14652547-14675692	control	clone mix	862,33	3,43326	-7,97252	4,23687	2,27E-05	0,000663285	yes
SLC26A11	groupIX:15162143-15169182	control	clone mix	10,6815	24,7375	1,21159	-3,88716	0,000101424	0,00232801	yes
DDIT4 (1 of 2)	groupV:834468-835775	control	clone mix	21,1832	439,858	4,37605	-5,0853	3,67E-07	1,98E-05	yes
SGCA	groupV:3433394-3454716	control	clone mix	0,494204	12,6367	4,67637	-3,00717	0,0026369	0,033442	yes
ANK3 (1 of 2)	groupV:3896963-3946199	control	clone mix	0,452707	3,46767	2,93732	-3,31413	0,000919295	0,0143441	yes
ENSGACG00000003651	groupV:3950346-3953124	control	clone mix	1,09323	13,9494	3,67353	-3,25466	0,00113529	0,0170326	yes
G6PC (2 of 2)	groupV:3963771-3966292	control	clone mix	46,1262	0,417699	-6,78698	4,13865	3,49E-05	0,000954266	yes
HABP2 (1 of 2)	groupV:8374943-8379475	control	clone mix	214,977	0,302155	-9,47468	5,4749	4,38E-08	3,16E-06	yes
PRODH2	groupV:9634156-9637430	control	clone mix	5,7927	0,157838	-5,19772	3,08449	0,00203898	0,0272568	yes
ENSGACG00000008706	groupV:10785151-10788629	control	clone mix	2,7581	25,1318	3,18777	-3,30289	0,000956924	0,0148199	yes
ENSGACG00000009409	groupV:11304062-11306049	control	clone mix	1,78138	748,056	8,714	-6,44241	1,18E-10	1,77E-08	yes
PDLIM1	groupV:1974582-1983884	control	clone mix	2,53609	166,11	6,03339	-5,66089	1,51E-08	1,26E-06	yes
SYNPO2L (2 of 2)	groupV:2058537-2067911	control	clone mix	0,190437	21,6026	6,82575	-4,31597	1,59E-05	0,000490919	yes
SOCS3 (2 of 2)	groupV:2198432-2199203	control	clone mix	6,09284	47,1337	2,95157	-3,09458	0,00197091	0,026528	yes
G6PC (1 of 2)	groupV:3960090-3962905	control	clone mix	71,1395	1,02725	-6,11379	5,11051	3,21E-07	1,77E-05	yes
ENSGACG00000006530	groupV:8380543-8394690	control	clone mix	0,454234	8,97901	4,30505	-3,92711	8,60E-05	0,0020269	yes
NDUFA4 (2 of 2)	groupV:9294682-9296160	control	clone mix	4,58168	203,135	5,47042	-3,69013	0,000224137	0,00450499	yes
MYLPF (1 of 2)	groupV:9421586-9424849	control	clone mix	1,35951	2943,02	11,08	-4,35631	1,32E-05	0,000419886	yes
ENSGACG00000007411	groupV:9502265-9515337	control	clone mix	28,8618	9,04875	-1,67337	7,73846	9,99E-15	3,70E-12	yes
ADPRH	groupV:9535024-9539327	control	clone mix	6,35803	33,5409	2,39927	-3,14094	0,00168406	0,0233792	yes
HRC	groupV:9805589-9808213	control	clone mix	1,81765	47,9077	4,72011	-4,35207	1,35E-05	0,000426888	yes
MSS51	groupV:10102896-10108491	control	clone mix	2,02839	20,3574	3,32715	-3,20104	0,00136932	0,0198057	yes
COX6B1 (1 of 2)	groupV:10666447-10667261	control	clone mix	13,5583	214,229	3,9819	-3,34936	0,000809981	0,012938	yes
ARG1	groupV:12104654-12112727	control	clone mix	86,6716	6,23926	-3,79611	3,39186	0,00069419	0,0114144	yes
A1CF	groupV:12143017-12152536	control	clone mix	140,346	0,200341	-9,45232	5,90315	3,57E-09	3,58E-07	yes
LECT2	groupV:12199129-12200797	control	clone mix	943,357	1,3448	-9,45427	5,90059	3,62E-09	3,63E-07	yes
SORBS1	groupVI:2813197-2836071	control	clone mix	5,1143	24,0492	2,23338	-3,40211	0,000668673	0,0110688	yes
KLHL31	groupVI:7845743-7847808	control	clone mix	4,91592	231,677	5,55851	-5,49692	3,86E-08	2,84E-06	yes
MINPP1 (1 of 2)	groupVI:10882411-10887130	control	clone mix	22,2469	1,47504	-3,91478	3,48943	0,000484058	0,00850407	yes
AGT	groupVI:11880471-11883962	control	clone mix	206,977	0,979324	-7,72347	5,61534	1,96E-08	1,58E-06	yes
SYNPO2L (1 of 2)	groupVI:13903813-13911529	control	clone mix	0,554369	10,7874	4,28236	-3,79377	0,000148378	0,00319605	yes
MYOZ1 (1 of 2)	groupVI:13915437-13919553	control	clone mix	4,51682	162,588	5,16977	-4,7555	1,98E-06	8,38E-05	yes
SPTBN1 (1 of 2)	groupVI:14434590-14520782	control	clone mix	9,49242	17,862	0,912046	-2,933	0,00335708	0,0404783	yes
ENSGACG00000011392	groupVI:14974758-14976817	control	clone mix	903,521	1,10782	-9,67169	7,58836	3,24E-14	1,10E-11	yes
LDB3	groupVI:15326453-15352359	control	clone mix	0,855691	17,0367	4,31541	-3,78101	0,000156193	0,00333485	yes
HAAO	groupVI:1320204-1324886	control	clone mix	238,537	0,461738	-9,01293	7,03581	1,98E-12	4,63E-10	yes
ENSGACG00000002791	groupVI:1439612-1448443	control	clone mix	0	3,54268	1,80E+308	1,80E+308	0,000800079	0,0128101	yes
MYPN	groupVI:2966708-2979350	control	clone mix	0,231588	3,69549	3,99614	-3,00866	0,00262405	0,0333144	yes
HABP2 (2 of 2)	groupVI:3639818-3643625	control	clone mix	475,154	0,564231	-9,71789	7,55063	4,33E-14	1,43E-11	yes
ENSGACG00000007954	groupVI:9278390-9279275	control	clone mix	148,429	0,740743	-7,64659	5,30567	1,12E-07	7,15E-06	yes
MAT1A (2 of 2)	groupVI:9279540-9284697	control	clone mix	140,89	0,425404	-8,37152	5,77119	7,87E-09	7,15E-07	yes
RGR	groupVI:9578475-9582364	control	clone mix	0,870457	17,299	4,31277	-2,8706	0,00409694	0,0472994	yes
ENSGACG00000010126	groupVI:12376810-12424549	control	clone mix	0,044435	6,34863	7,15861	-4,24464	2,19E-05	0,000644025	yes
ACTN2	groupVI:12428216-12443132	control	clone mix	0,686077	90,6737	7,04617	-5,33839	9,38E-08	6,12E-06	yes
ENSGACG00000012414	groupVI:17075679-17076923	control	clone mix	2775,5	4,71611	-9,20094	5,49502	3,91E-08	2,87E-06	yes
PPM1K (2 of 2)	groupVII:242335-245534	control	clone mix	1,76913	27,2789	3,94667	-3,5444	0,000393509	0,00717548	yes
FGB	groupVII:527974-532446	control	clone mix	966,212	2,09336	-8,85037	5,39652	6,79E-08	4,63E-06	yes
ENSGACG00000018934	groupVII:1789283-1791942	control	clone mix	1,97143	23,9289	3,60144	-3,44126	0,000579002	0,00984081	yes
SPAG17	groupVII:7175722-7192633	control	clone mix	0,119127	2,99917	4,65399	-3,07086	0,00213446	0,0282737	yes
ENSGACG00000019954	groupVII:9000504-9004170	control	clone mix	20,7937	0,514413	-5,33707	4,37109	1,24E-05	0,000396448	yes
ENSGACG00000019958	groupVII:9005339-9006568	control	clone mix	19,6919	1,40618	-3,80775	2,87995	0,00397733	0,0462224	yes
MLXIPL	groupVII:14513149-14527273	control	clone mix	23,2135	3,0872	-2,91059	3,09412	0,00197395	0,0265615	yes
HSPB1	groupVII:14587962-14593757	control	clone mix	13,0002	178,985	3,78324	-5,36089	8,28E-08	5,50E-06	yes
TM7SF2	groupVII:15454237-15462511	control	clone mix	8,28028	0,416081	-4,31474	3,21607	0,00129959	0,0189922	yes
MYO18A (2 of 2)	groupVII:16142591-16192711	control	clone mix	0,214228	8,8896	5,3749	-4,35601	1,32E-05	0,000420355	yes
CORO6	groupVII:19433748-19444274	control	clone mix	2,8255	25,1271	3,15266	-3,70124	0,000214551	0,00434446	yes
KL	groupVII:19999570-20005838	control	clone mix	14,4674	0,373432	-5,27582	4,17443	2,99E-05	0,000836716	yes
NBEA (2 of 2)	groupVII:20054775-20129917	control	clone mix	1,30105	4,36292	1,74561	-3,71992	0,000199285	0,00408555	yes
ENSGACG00000020566	groupVII:20248461-20250782	control	clone mix	39,5668	0	-1,80E+308	-1,80E+308	5,70E-05	0,00143887	yes
ANGPTL5	groupVII:21575115-21578135	control	clone mix	10,1268	71,9883	2,82959	-3,32312	0,000890158	0,0139683	yes
PYGM (2 of 2)	groupVII:21858508-21866071	control	clone mix	29,3403	368,952	3,65248	-3,46035	0,000539476	0,00929305	yes
ENSGACG00000020653	groupVII:21876768-21881377	control	clone mix	120,16	0,3245	-8,53252	6,38953	1,66E-10	2,41E-08	yes
RYR1 (2 of 2)	groupVII:22076557-22115269	control	clone mix	0,18344	10,559	5,84703	-4,96901	6,73E-07	3,33E-05	yes
ENSGACG00000020833	groupVII:26254567-26256332	control	clone mix	23,2785	0	-1,80E+308	-1,80E+308	0,00120415	0,0178592	yes
CLDN2	groupVII:26257018-26258074	control	clone mix	23,8342	0	-1,80E+308	-1,80E+308	0,00263022	0,0333755	yes
ENSGACG00000020917	groupVII:27905755-27917076	control	clone mix	63,1967	0,302277	-7,70784	5,76139	8,34E-09	7,52E-07	yes
FGA	groupVII:533689-538270	control	clone mix	297,764	0,446606	-9,38095	6,4606	1,04E-10	1,59E-08	yes
ENSGACG00000018908	groupVII:1632700-1636076	control	clone mix	1,23811	16,8961	3,77047	-3,97191	7,13E-05	0,00173363	yes
NDRG2	groupVII:1755255-1766248	control	clone mix	18,2888	86,5196	2,24207	-2,9488	0,00319011	0,0388804	yes
CIDEB	groupVII:2913581-2915531	control	clone mix	114,571	0,846771	-7,08005	5,45774	4,82E-08	3,44E-06	yes

TM4SF5	groupVII:3076903-3080943	control	clone mix	17,5224	1,1984	-3,87002	2,87578	0,00403026	0,046702	yes
SHBG	groupVII:4261544-4265559	control	clone mix	89,9265	0,581806	-7,27206	5,15537	2,53E-07	1,44E-05	yes
FABP2 (2 of 2)	groupVII:4922501-4924058	control	clone mix	2,67981	125,136	5,54522	-4,34293	1,41E-05	0,000442383	yes
MYOZ2 (2 of 2)	groupVII:6072902-6079434	control	clone mix	2,39568	36,809	3,94155	-3,3351	0,000852697	0,0134876	yes
MOGAT2	groupVII:13463876-13470302	control	clone mix	26,2873	0,202314	-7,02163	3,32764	0,000875855	0,0137844	yes
F9 (2 of 2)	groupVII:18693246-18697244	control	clone mix	46,8491	0,803874	-5,86491	5,50534	3,68E-08	2,72E-06	yes
ENSGACG00000020469	groupVII:19028240-19050014	control	clone mix	0,632878	13,263	4,38933	-3,32607	0,000880791	0,0138487	yes
VTN (1 of 2)	groupVII:19070730-19075868	control	clone mix	290,729	0,291691	-9,96102	5,99316	2,06E-09	2,22E-07	yes
ENSGACG00000020614	groupVII:21446433-21456144	control	clone mix	7,22135	0,403378	-4,16206	3,06251	0,00219492	0,0288996	yes
ENSGACG00000020615	groupVII:21458626-21466587	control	clone mix	12,3601	0,854795	-3,85397	3,12547	0,00177518	0,0243874	yes
USP28	groupVII:24214695-24228941	control	clone mix	1,94847	60,7267	4,96192	-4,83123	1,36E-06	6,07E-05	yes
KLHL30	groupVIII:1730936-1734754	control	clone mix	0,726918	21,2296	4,86814	-4,48394	7,33E-06	0,000254858	yes
ENSGACG00000004463	groupVIII:3125645-3129121	control	clone mix	11,2374	0,405751	-4,79157	3,23738	0,00120635	0,0178864	yes
AGXT (2 of 2)	groupVIII:3130254-3133238	control	clone mix	103,829	0,399932	-8,02024	5,50591	3,67E-08	2,72E-06	yes
IRF4 (2 of 2)	groupVIII:3510443-3515871	control	clone mix	24,12	83,3801	1,78947	-3,3487	0,000811916	0,0129617	yes
ENSGACG00000005883	groupVIII:5803164-5824796	control	clone mix	438,729	5,21064	-6,39573	5,64308	1,67E-08	1,38E-06	yes
KNG1	groupVIII:6356135-6360741	control	clone mix	244,931	0,814789	-8,23173	6,13959	8,27E-10	9,96E-08	yes
TM4SF4	groupVIII:6672510-6675919	control	clone mix	79,6986	0	-1,80E+308	-1,80E+308	8,85E-05	0,00207617	yes
USP13	groupVIII:12640082-12660820	control	clone mix	0,824686	42,1788	5,67653	-5,0468	4,49E-07	2,35E-05	yes
ENSGACG00000010050	groupVIII:12782195-12784724	control	clone mix	6,09156	33,2085	2,44667	-4,40806	1,04E-05	0,000343556	yes
NEXN	groupVIII:12857577-12864611	control	clone mix	1,74097	32,0362	4,20174	-4,52537	6,03E-06	0,000215899	yes
ENSGACG00000010184	groupVIII:12914091-12928021	control	clone mix	0,504967	21,1815	5,39047	-4,58073	4,63E-06	0,000172874	yes
GPX4 (2 of 4)	groupVIII:17193570-17195072	control	clone mix	348,728	11,4666	-4,92659	4,15481	3,26E-05	0,000899041	yes
GPX4 (3 of 4)	groupVIII:17201147-17204765	control	clone mix	56,6961	2,19144	-4,6933	3,06314	0,0021903	0,0288513	yes
GPX4 (4 of 4)	groupVIII:17206368-17210137	control	clone mix	1111,97	45,4575	-4,61245	2,92271	0,00347004	0,0415363	yes
CYP2J2 (3 of 6)	groupVIII:19106718-19119924	control	clone mix	93,2564	5,87012	-3,98974	3,78966	0,000150853	0,00324077	yes
MYLK4 (1 of 2)	groupVIII:3765987-3770589	control	clone mix	0,69573	58,9463	6,40473	-4,20026	2,67E-05	0,000760614	yes
FETUB (1 of 3)	groupVIII:5057121-5059646	control	clone mix	82,2114	1,7167	-5,58163	4,33245	1,47E-05	0,00046061	yes
FETUB (2 of 3)	groupVIII:5061229-5065590	control	clone mix	510,949	14,1765	-5,17161	3,68114	0,00023219	0,004639	yes
FETUB (3 of 3)	groupVIII:5068180-5071857	control	clone mix	757,164	2,42178	-8,28839	5,28977	1,22E-07	7,71E-06	yes
ELTD1	groupVIII:12041724-12054205	control	clone mix	6,45516	19,5881	1,60145	-3,02764	0,00246475	0,0317003	yes
ENSGACG00000009633	groupVIII:12452844-12462417	control	clone mix	86,9571	3,52903	-4,62296	4,19445	2,74E-05	0,000777028	yes
ENSGACG00000011294	groupVIII:14348055-14365334	control	clone mix	331,707	1374,9	2,05134	-3,04908	0,00229546	0,0299512	yes
CYP2J2 (1 of 6)	groupVIII:15158423-15165942	control	clone mix	62,7251	0,524093	-6,90308	6,08945	1,13E-09	1,31E-07	yes
CYP2J2 (2 of 6)	groupVIII:15168449-15172576	control	clone mix	34,9999	0,182094	-7,58652	3,47344	0,000513823	0,00893042	yes
FPGT-TNNI3K	groupVIII:15337021-15350430	control	clone mix	0,485328	5,58082	3,52345	-3,24145	0,00118923	0,0176817	yes
CREB3L3	groupVIII:16297684-16302922	control	clone mix	13,2353	0,455638	-4,86036	3,2919	0,000995133	0,0153012	yes
SERPINC1	groupVIII:17468884-17472470	control	clone mix	221,706	0,591508	-8,55003	5,51083	3,57E-08	2,65E-06	yes
ENSGACG00000002089	groupX:1534874-1544868	control	clone mix	2,10218	67,7936	5,01119	-4,92275	8,53E-07	4,09E-05	yes
APOE (2 of 2)	groupX:2070460-2073621	control	clone mix	185,613	0	-1,80E+308	-1,80E+308	0,000207215	0,00421955	yes
ENSGACG00000009880	groupX:15250779-15253079	control	clone mix	550,808	0,880627	-9,2888	4,96983	6,70E-07	3,32E-05	yes
ENSGACG00000009883	groupX:15255685-15258047	control	clone mix	541,114	0,798397	-9,40461	4,22641	2,37E-05	0,000689702	yes
ENSGACG00000002738	groupX:3105897-3107972	control	clone mix	3,3972	30,2687	3,1554	-2,99401	0,00275341	0,0346035	yes
GMPR	groupX:4866594-4871364	control	clone mix	12,2946	129,505	3,39691	-3,54929	0,000386271	0,00706693	yes
CAP2	groupX:7920880-7935066	control	clone mix	3,39544	70,2159	4,37013	-4,8695	1,12E-06	5,15E-05	yes
LRRC14B	groupX:7979041-7981406	control	clone mix	2,32991	18,209	2,9663	-2,94988	0,00317895	0,0387757	yes
ENSGACG00000007507	groupX:11295093-11298006	control	clone mix	228,053	14,6376	-3,96162	3,50392	0,000458463	0,00813578	yes
FHOD3 (1 of 2)	groupX:11325772-11366320	control	clone mix	0,655774	10,4116	3,98885	-4,09692	4,19E-05	0,00111007	yes
ENPP2 (2 of 2)	groupX:14812601-14836398	control	clone mix	39,8483	3,13234	-3,66921	3,2859	0,00101657	0,0155675	yes
ENSGACG00000008064	groupXI:5057905-5058802	control	clone mix	1,52053	16,2536	3,41811	-3,08373	0,00204422	0,0273142	yes
TCAP	groupXI:6193595-6194777	control	clone mix	2,24873	45,6374	4,34303	-4,13199	3,60E-05	0,00097753	yes
ENSGACG00000009821	groupXI:7441924-7458807	control	clone mix	0,390408	6,92405	4,14856	-3,22038	0,00128021	0,0187634	yes
ENSGACG00000009952	groupXI:7727054-7730471	control	clone mix	28,8209	0,147555	-7,60972	2,99511	0,00274343	0,0345057	yes
ACSF2 (2 of 2)	groupXI:8432711-8438009	control	clone mix	7,88855	0,793091	-3,3142	4,09204	4,28E-05	0,00113007	yes
CYP2W1 (1 of 5)	groupXI:9721383-9723273	control	clone mix	139,41	0	-1,80E+308	-1,80E+308	0,000180018	0,0037538	yes
SRL (1 of 2)	groupXI:9977714-9988287	control	clone mix	3,79112	91,6958	4,59616	-4,49993	6,80E-06	0,000239138	yes
ENSGACG00000012174	groupXI:11252518-11253786	control	clone mix	195,221	8329,02	5,41496	-3,04147	0,00235428	0,0305623	yes
ENSGACG00000013583	groupXI:13317270-13317908	control	clone mix	49,4293	377,876	2,93448	-3,17072	0,0015206	0,021538	yes
IGFALS	groupXI:13771947-13774024	control	clone mix	56,016	0,818305	-6,09706	4,51481	6,34E-06	0,00022534	yes
HAO1	groupXI:562837-569808	control	clone mix	75,0633	0	-1,80E+308	-1,80E+308	1,32E-06	5,93E-05	yes
CBX7 (2 of 2)	groupXI:4748361-4752125	control	clone mix	14,8948	45,4727	1,6102	-3,08926	0,00200657	0,026912	yes
SOCS3 (1 of 2)	groupXI:9066120-9067557	control	clone mix	8,54547	230,874	4,7558	-5,3443	9,08E-08	5,95E-06	yes
RPL3L	groupXI:10910646-10915362	control	clone mix	8,3674	346,275	5,371	-4,33143	1,48E-05	0,000462417	yes
ATP2A1 (1 of 2)	groupXI:12754741-12769556	control	clone mix	16,9965	796,388	5,55016	-4,89576	9,79E-07	4,59E-05	yes
PPP1R27 (1 of 2)	groupXI:12863132-12864817	control	clone mix	1,57848	32,4736	4,36266	-4,18061	2,91E-05	0,000817678	yes
DHRS7C (1 of 2)	groupXI:15471062-15474973	control	clone mix	2,01359	34,846	4,11315	-3,49121	0,000480846	0,00845817	yes
ENSGACG00000014547	groupXI:15599191-15613431	control	clone mix	32,7309	2,78222	-3,55635	3,28991	0,0010022	0,01539	yes
CFP	groupXI:15888750-15891806	control	clone mix	95,5085	0,510596	-7,5473	5,0515	4,38E-07	2,31E-05	yes
SCN4A (2 of 2)	groupXI:16076435-16099888	control	clone mix	0,642176	5,54402	3,10989	-3,12909	0,00175349	0,0241486	yes
LMOD3	groupXII:2093686-2095818	control	clone mix	3,4425	16,3324	2,24621	-3,24364	0,00118012	0,0175748	yes
ENSGACG00000003501	groupXII:2161696-2164086	control	clone mix	3,04653	20,0081	2,71534	-2,92615	0,00343187	0,0411803	yes
OVGP1 (3 of 5)	groupXII:2184472-2188227	control	clone mix	132,675	0,452275	-8,19648	5,74929	8,96E-09	8,00E-07	yes
TNNC2 (2 of 2)	groupXII:3687731-3690627	control	clone mix	12,0225	132,311	3,46013	-3,61404	0,000301462	0,00575604	yes
TNNC2 (1 of 2)	groupXII:3692239-3694594	control	clone mix	38,9134	713,242	4,19605	-3,82527	0,000130627	0,00287404	yes
CA6 (1 of 2)	groupXII:9898691-9902829	control	clone mix	3,44305	76,4363	4,4725	-5,04772	4,47E-07	2,34E-05	yes
CA6 (2 of 2)	groupXII:9907407-9923316	control	clone mix	1,36533	29,7466	4,4454	-3,46438	0,000531458	0,00918072	yes
PFKM (1 of 2)	groupXII:10481807-10490116	control	clone mix	4,37929	69,9735	3,99804	-3,6559	0,000256282	0,00503408	yes
G6PD (2 of 2)	groupXII:10763215-10767443	control	clone mix	13,1035	0,459733	-4,83302	3,52591	0,000422036	0,00760138	yes
DNAJC22	groupXII:11273359-11276126	control	clone mix	18,0072	0	-1,80E+308	-1,80E+308	0,000506774	0,00882908	yes
APOBEC2 (2 of 2)	groupXII:12004006-12005702	control	clone mix	4,50381	114,328	4,66589	-4,85335	1,21E-06	5,52E-05	yes
TNNT2 (1 of 2)	groupXII:12120259-12127679	control	clone mix	2,03777	426,764	7,7103	-4,66217	3,13E-06	0,000123832	yes
ITGA5 (1 of 2)	groupXII:13865836-13893682	control	clone mix	3,89684	19,3759	2,31389	-3,07079	0,00213492	0,0282792	yes
JPH2	groupXII:15320377-15331165	control	clone mix	1,59454	24,1914	3,92328	-4,39996	1,08E-05	0,000354458	yes
ENSGACG00000012654	groupXII:16665952-16666789	control	clone mix	0,857158	296,036	8,432	-4,38379	1,17E-05	0,000377388	yes
ENSGACG00000012657	groupXII:16668755-16670927	control	clone mix	3,66469	815,211	7,79734	-5,14001	2,75E-07	1,54E-05	yes
ENSGACG00000002805	groupXII:664630-666046	control	clone mix	13,8935	0	-1,80E+308	-1,80E+308	0,00120415	0,0178592	yes
ANGPTL7	groupXII:5335335-5401047	control	clone mix	0,170615	20,1644	6,88492	-3,30718	0,000942395	0,0146378	yes
HSPB7	groupXII:5795326-5797360	control	clone mix	3,66327	154,775	5,4009	-4,69605	2,65E-06	0,000107539	yes
MMP9	groupXII:10243687-10248615	control	clone mix	59,539	237,212	1,99427	-6,20919	5,33E-10	6,73E-08	yes
ENSGACG00000010196	groupXII:12771424-12775389	control	clone mix	79,947	0,296465	-8,07504	4,83436	1,34E-06	5,99E-05	yes
HNF4A	groupXII:15285392-15289946	control	clone mix	30,7907	0,223812	-7,10406	3,66749	0,000244939	0,00484946	yes
SLC13A3	groupXII:15510544-15517590	control	clone mix	10,6638	0,231229	-5,52726	4,10021	4,13E-05	0,00109701	yes
ENSGACG00000012954	groupXII:17267201-17271644	control	clone mix	16,4577	1463,41	6,47443	-4,25265	2,11E-05	0,00062499	yes
ACAA2	groupXIII:1514687-1518522	control	clone mix	36,8038	125,965	1,7751	-3,90019	9,61E-05	0,00222532	yes
MYL7	groupXIII:1859284-1860683	control	clone mix	5,31357	1087,87	7,67761	-5,178	2,24E-07	1,30E-05	yes
ENSGACG00000006029	groupXIII:4563438-4568919	control	clone mix	3099,77	5,47363	-9,14545	4,33616	1,45E-05	0,000454108	yes
FABP1	groupXIII:5134440-5135110	control	clone mix	185,4	1,00484	-7,52754	3,81208	0,000137803	0,00300485	yes
HSD17B3	groupXIII:5920864-5926341	control	clone mix	35,2854	2,37663	-3,89208	4,99251	5,96E-07	3,00E-05	yes
ENSGACG00000010933	groupXIII:12092539-12093740	control	clone mix	1434,34	6,58845	-7,76623	5,10254	3,35E-07	1,83E-05	yes
ENSGACG00000011617	groupXIII:13147140-13149317	control	clone mix	2821,64	5,17121	-9,09182	4,78753	1,69E-06	7,31E-05	yes
HNF1A	groupXIII:14760749-14765516	control	clone mix	9,21614	0,517606	-4,15424	2,88252	0,00394509	0,0459396	yes
ATP2A2 (1 of 2)	groupXIII:16391376-16408158	control	clone mix	8,2731	45,3494	2,45458	-3,02087	0,00252052	0,032273	yes
ENSGACG00000013793	groupXIII:17319363-17325641	control	clone mix	20,561	0,281032	-6,19303	4,76325	1,90E-06	8,11E-05	yes
ENSGACG00000014699	groupXIII:19762339-19764190	control	clone mix	34,8026	0,544313	-5,99861	4,6545	3,25E-06	0,000127809	yes
SERPIND1	groupXIII:1690423-1713758	control	clone mix	205,922	0,476208	-8,75629	5,70718	1,15E-08	9,93E-07	yes
ENSGACG00000010145	groupXIII:9883548-9884993	control	clone mix	99,6216	1,57494	-5,98309	5,0172	5,24E-07	2,69E-05	yes
KLF9	groupXIII:11679462-11681419	control	clone mix	11,7021	75,0103	2,68032	-3,37536	0,000737203	0,0119868	yes
ENSGACG00000010837	groupXIII:12012344-12019732	control	clone mix	0,874564	8,62545	3,30196	-2,95577	0,00311893	0,0381901	yes
DUSP26 (2 of 2)	groupXIII:13163432-13165076	control	clone mix	75,5342	2,62366	-4,84748	4,37017	1,24E-05	0,000397841	yes
HPD	groupXIII:13290214-13294920	control	clone mix	231,475	1,04006	-7,79804	5,03313	4,83E-07	2,50E-05	yes
NAALADL1	groupXIII:16833470-16840533	control	clone mix	6,97233	0,607739	-3,52012	3,83788	0,000124103	0,00275382	yes
NIPSNAP1	groupXIII:18139725-18145216	control	clone mix	19,2274	0,92374	-4,37953	3,92852	8,55E-05	0,00201707	yes
GRAMD3 (2 of 2)	groupXIII:19874115-19881489	control	clone mix	18,647	0	-1,80E+308	-1,80E+308	0,000678638	0,0112038	yes
ENSGACG00000014811	groupXIII:20074137-20082953	control	clone mix	107,827	0,302411	-8,47799	5,5334	3,14E-08	2,37E-06	yes
MEF2C (2 of 2)	groupXIV:315635-326877	control	clone mix	1,28259	30,988	4,59457	-3,82701	0,000129711	0,00285762	yes
ENSGACG00000015778	groupXIV:1050068-1052511	control	clone mix	7,4958	186,564	4,63744	-3,93371	8,36E-05	0,00198065	yes
C9	groupXIV:1639733-1643779	control	clone mix	141,829	1,58198	-6,48627	4,81527	1,47E-06	6,49E-05	yes

AGXT2 (1 of 2)	groupXIV:3999373-4006176	control	clone mix	14,8505	0,501107	-4,88925	3,66343	0,00024886	0,00491356	yes
BMP10 (2 of 2)	groupXIV:6045851-6047708	control	clone mix	0,474013	34,0852	6,16807	-3,57154	0,000354888	0,0065878	yes
AMBP	groupXIV:7780908-7787080	control	clone mix	546,887	1,6615	-8,36261	5,01359	5,34E-07	2,73E-05	yes
C6	groupXIV:10371246-10378853	control	clone mix	98,9399	6,54284	-3,91856	9,51926	0	0	yes
LYZ	groupXIV:13700783-13704111	control	clone mix	507,474	1,87069	-8,08362	5,92559	3,11E-09	3,19E-07	yes
TPM2	groupXIV:14793584-14812370	control	clone mix	58,3256	486,306	3,05966	-3,4426	0,000576159	0,0098013	yes
ENSGACG00000015857	groupXIV:1656998-1659360	control	clone mix	423,183	1,28341	-8,36516	6,03958	1,55E-09	1,73E-07	yes
SUSD2	groupXIV:6510960-6517608	control	clone mix	9,21498	0,107208	-6,4255	3,83206	0,000127073	0,00280852	yes
PGAM2	groupXIV:8912216-8913964	control	clone mix	23,4726	270,153	3,52473	-3,8869	0,000101531	0,00233007	yes
ENSGACG00000018177	groupXIV:11800033-11835330	control	clone mix	11,5846	0	-1,80E+308	-1,80E+308	0,000538967	0,00928614	yes
SLC27A6	groupXIV:14021775-14037860	control	clone mix	104,489	8,74887	-3,57811	3,29587	0,000981181	0,015127	yes
ENSGACG00000018499	groupXIV:14479114-14484541	control	clone mix	6,07355	110,839	4,18979	-4,1237	3,73E-05	0,00100711	yes
ENSGACG00000002902	groupXIX:2484536-2497605	control	clone mix	0,667831	130,944	7,61526	-3,43153	0,000600187	0,0101358	yes
ENSGACG00000003003	groupXIX:2530796-2539506	control	clone mix	2,5891	1058,25	8,67502	-3,6757	0,000237202	0,00472103	yes
CHCHD3 (2 of 2)	groupXIX:6098399-6102805	control	clone mix	17,9348	36,1507	1,01126	-3,09815	0,00194734	0,0262684	yes
HAL	groupXIX:6242360-6247553	control	clone mix	57,4697	1,01965	-5,81666	4,23128	2,32E-05	0,000677307	yes
TJP1 (1 of 2)	groupXIX:7580595-7597632	control	clone mix	2,06437	8,68968	2,0736	-2,96236	0,0030529	0,0375677	yes
ENSGACG00000006351	groupXIX:7669051-7670811	control	clone mix	15,5011	1,22167	-3,66544	3,19823	0,00138272	0,0199588	yes
ENSGACG00000006644	groupXIX:7825247-7841880	control	clone mix	94,0636	0,516539	-7,50861	6,17147	6,77E-10	8,32E-08	yes
TNNI2 (1 of 5)	groupXIX:9287887-9290073	control	clone mix	36,9595	328,742	3,15294	-3,07684	0,00209209	0,0278249	yes
TNNI2 (3 of 5)	groupXIX:9291924-9297476	control	clone mix	72,7765	577,793	2,98901	-2,87017	0,0041025	0,047349	yes
TNNI2 (4 of 5)	groupXIX:9320461-9322445	control	clone mix	1,06385	80,3323	6,23861	-3,37252	0,000744837	0,0120866	yes
TNNI2 (5 of 5)	groupXIX:9323370-9326473	control	clone mix	1,96523	154,878	6,30029	-5,13631	2,80E-07	1,57E-05	yes
ALPK3 (2 of 2)	groupXIX:12932395-12942731	control	clone mix	0,154534	12,7486	6,36627	-4,4879	7,19E-06	0,000250879	yes
ENSGACG00000012381	groupXIX:15731481-15746320	control	clone mix	60,9356	0,156387	-8,60602	4,45974	8,21E-06	0,00028048	yes
MIOX	groupXIX:16666626-16669474	control	clone mix	474,137	0,694528	-9,41505	5,11244	3,18E-07	1,75E-05	yes
ENSGACG00000012962	groupXIX:16699629-16700761	control	clone mix	0,968136	757,112	9,61108	-5,11537	3,13E-07	1,73E-05	yes
CETP	groupXIX:1019030-1027090	control	clone mix	84,5423	0,221515	-8,57613	5,14243	2,71E-07	1,53E-05	yes
ENSGACG00000002832	groupXIX:2343012-2345777	control	clone mix	30,9381	0,643554	-5,58718	3,91542	9,02E-05	0,00211034	yes
AKR1D1 (2 of 2)	groupXIX:4625246-4628452	control	clone mix	106,482	0,453757	-7,87448	5,65567	1,55E-08	1,29E-06	yes
ENSGACG00000004200	groupXIX:5960032-5963222	control	clone mix	1,97032	2675,62	10,4072	-5,55026	2,85E-08	2,19E-06	yes
DENND4A (2 of 2)	groupXIX:6453753-6469506	control	clone mix	2,7655	72,4368	4,71111	-5,56309	2,65E-08	2,05E-06	yes
ENSGACG00000005365	groupXIX:6873764-6878031	control	clone mix	1,90929	15,0284	2,97659	-3,67184	0,000240806	0,00478006	yes
FLNC (2 of 2)	groupXIX:11818853-11840148	control	clone mix	0,669461	26,0326	5,28118	-5,44267	5,25E-08	3,70E-06	yes
KLF13	groupXIX:12552459-12562563	control	clone mix	5,31155	53,0245	3,31945	-3,1483	0,00164226	0,0229142	yes
NR1H4	groupXIX:15000176-15007782	control	clone mix	29,7017	0,176567	-7,39419	4,3252	1,52E-05	0,000473756	yes
ENSGACG00000011846	groupXIX:15110438-15111429	control	clone mix	432,416	0,77581	-9,1225	6,73807	1,61E-11	3,02E-09	yes
ENSGACG00000011851	groupXIX:15111527-15129934	control	clone mix	382,613	0,473054	-9,65967	6,10991	9,97E-10	1,17E-07	yes
CPT1B	groupXIX:15701474-15706877	control	clone mix	1,63908	26,9163	4,03752	-3,93936	8,17E-05	0,001942	yes
ENSGACG00000013564	groupXIX:18279322-18297557	control	clone mix	0	6,35517	1,80E+308	1,80E+308	6,01E-05	0,00150263	yes
ENSGACG00000013996	groupXIX:19940087-19949398	control	clone mix	16,8797	0,721122	-4,5489	3,50397	0,000458371	0,00813449	yes
ZFP106 (1 of 2)	groupXV:1489736-1495278	control	clone mix	6,62524	82,1413	3,63206	-3,98656	6,70E-05	0,00164672	yes
ADSSL1	groupXV:2673297-2677197	control	clone mix	22,0206	439,238	4,31808	-3,76962	0,000163499	0,00346497	yes
ENSGACG00000007640	groupXV:4787065-4788482	control	clone mix	84,4548	1,47965	-5,83486	3,8762	0,000106101	0,00241612	yes
SERPINA10 (1 of 2)	groupXV:5380572-5382577	control	clone mix	181,508	1,74941	-6,69702	7,2119	5,52E-13	1,45E-10	yes
ELL (2 of 2)	groupXV:8297534-8304173	control	clone mix	6,00553	48,082	3,00113	-3,64833	0,000263951	0,00515684	yes
FERMT2	groupXV:8881764-8912733	control	clone mix	7,96454	19,5083	1,29243	-3,20913	0,00133136	0,0193611	yes
SLC2A2	groupXV:10147689-10155333	control	clone mix	13,2943	0	-1,80E+308	-1,80E+308	0,00418103	0,0480541	yes
HIVEP2 (2 of 2)	groupXV:11519397-11525911	control	clone mix	0,156782	5,33463	5,08855	-3,61697	0,000298069	0,0057026	yes
TXLNB (1 of 2)	groupXV:11528830-11533803	control	clone mix	5,30352	130,071	4,6162	-5,10829	3,25E-07	1,78E-05	yes
THBS1 (2 of 2)	groupXV:2296799-2303009	control	clone mix	5,34663	28,5636	2,41748	-2,95694	0,00310704	0,0380761	yes
ENSGACG00000006109	groupXV:2485490-2488657	control	clone mix	7,00411	128,56	4,1981	-3,27757	0,00104704	0,0159464	yes
QPCT	groupXV:3702226-3707282	control	clone mix	23,1847	1,90902	-3,60227	2,90334	0,00369209	0,0436205	yes
PABPC4	groupXV:4121201-4128497	control	clone mix	5,34247	191,724	5,16538	-5,2005	1,99E-07	1,17E-05	yes
SIX1	groupXV:5711700-5713900	control	clone mix	2,98137	31,7399	3,41225	-3,84139	0,000122339	0,00272123	yes
TRIM63	groupXVI:2043746-2051139	control	clone mix	2,81423	34,4234	3,61258	-3,73682	0,00018636	0,00386321	yes
ACMSD	groupXVI:4108198-4112993	control	clone mix	58,21	0,930327	-5,96738	4,92644	8,37E-07	4,02E-05	yes
OBSL1 (2 of 2)	groupXVI:5028195-5052297	control	clone mix	0,218608	9,41372	5,42834	-4,48733	7,21E-06	0,00025144	yes
SLC4A3	groupXVI:5863098-5885871	control	clone mix	0,287869	8,59642	4,90025	-4,1899	2,79E-05	0,000789973	yes
TMEM182	groupXVI:7304540-7308010	control	clone mix	3,29328	100,343	4,92927	-6,57111	4,99E-11	8,28E-09	yes
ILDR1 (1 of 2)	groupXVI:7575142-7581994	control	clone mix	15,9083	1,42759	-3,47813	4,37808	1,20E-05	0,000385761	yes
ENSGACG00000004971	groupXVI:10219999-10238567	control	clone mix	1,43071	35,1081	4,617	-4,58161	4,61E-06	0,000172237	yes
MYL1	groupXVI:12804558-12809401	control	clone mix	63,654	837,675	3,71807	-3,077	0,00209093	0,0278127	yes
SPEG (1 of 2)	groupXVI:5076318-5105856	control	clone mix	0,70445	5,7532	3,0298	-3,08866	0,0020106	0,0269555	yes
FHL2 (1 of 2)	groupXVI:7350266-7355490	control	clone mix	1,13922	23,8294	4,38662	-4,42839	9,49E-06	0,000317191	yes
ENSGACG00000005264	groupXVI:10507461-10514195	control	clone mix	37,5172	1,0995	-5,09263	4,0586	4,94E-05	0,00127506	yes
UPP2	groupXVI:11169073-11170928	control	clone mix	135,155	1,67291	-6,33611	4,37095	1,24E-05	0,000396673	yes
DES	groupXVI:12208793-12214806	control	clone mix	4,49978	276,331	5,9404	-5,73871	9,54E-09	8,45E-07	yes
FER1L6	groupXVI:16508074-16523530	control	clone mix	0,0693503	4,52091	6,02657	-2,92511	0,00344332	0,0412879	yes
F5	groupXVI:17927939-17939340	control	clone mix	43,205	0,442377	-6,60978	4,5325	5,83E-06	0,000209847	yes
DAG1 (1 of 2)	groupXVII:379491-381905	control	clone mix	4,8248	23,6413	2,29277	-2,85141	0,00435256	0,049567	yes
IGFN1 (4 of 5)	groupXVII:3158232-3172862	control	clone mix	0,220983	77,8778	8,46113	-4,45954	8,21E-06	0,000280692	yes
TNNT2 (2 of 2)	groupXVII:3325340-3330152	control	clone mix	5,61573	36,3914	2,69605	-2,95263	0,00315082	0,0385008	yes
PPM1J	groupXVII:3666387-3676360	control	clone mix	29,2041	111,639	1,9346	-3,28685	0,00101316	0,0155252	yes
CYP24A1	groupXVII:3843198-3847380	control	clone mix	219,445	1,23101	-7,47787	6,59345	4,30E-11	7,25E-09	yes
SOAT2	groupXVII:5460811-5469767	control	clone mix	31,0517	0,463152	-6,06704	4,66956	3,02E-06	0,000120103	yes
ENSGACG00000009200	groupXVII:8817602-8822247	control	clone mix	4,25078	18,8669	2,15006	-3,35143	0,000803965	0,0128611	yes
ENSGACG00000009583	groupXVII:9731456-9734766	control	clone mix	37,2941	1,8337	-4,34612	3,27046	0,00107373	0,0162786	yes
ENSGACG00000009592	groupXVII:9737213-9738973	control	clone mix	145,57	3,97044	-5,19627	7,22238	5,11E-13	1,36E-10	yes
SLC41A3 (1 of 2)	groupXVII:10995214-11001714	control	clone mix	0,495218	13,4083	4,75892	-3,06635	0,00216692	0,0286111	yes
G0S2	groupXVII:12665596-12666123	control	clone mix	154,314	6,14066	-4,65133	4,14682	3,37E-05	0,000926008	yes
ENSGACG00000005023	groupXVII:3249923-3258158	control	clone mix	15,2506	238,259	3,96559	-3,56468	0,0003643	0,00673245	yes
PLG	groupXVIII:3113722-3122456	control	clone mix	216,823	0,38897	-9,12264	6,68364	2,33E-11	4,20E-09	yes
ENSGACG00000006829	groupXVIII:5439706-5440561	control	clone mix	73,2276	0	-1,80E+308	-1,80E+308	0,00348204	0,0416455	yes
ENSGACG00000006833	groupXVIII:5443127-5444747	control	clone mix	53,0978	0,36298	-7,19262	4,39764	1,09E-05	0,000357722	yes
ENSGACG00000007661	groupXVIII:6547159-6551089	control	clone mix	2,14093	526,116	7,941	-4,34442	1,40E-05	0,000439815	yes
LRG1	groupXVIII:9292141-9294935	control	clone mix	72,6284	0,207769	-8,44941	3,94862	7,86E-05	0,00188079	yes
APOB (5 of 5)	groupXVIII:9330964-9346541	control	clone mix	397,857	0,736573	-9,07721	8,05282	8,88E-16	3,93E-13	yes
APOB (1 of 5)	groupXVIII:9364878-9366348	control	clone mix	142,41	0,401887	-8,46904	6,07211	1,26E-09	1,44E-07	yes
SLC22A16	groupXVIII:11846807-11852323	control	clone mix	17,5664	2,48535	-2,8213	2,85172	0,00434832	0,0495314	yes
FILIP1 (1 of 2)	groupXVIII:12393848-12399993	control	clone mix	0,88956	16,9924	4,25565	-4,1051	4,04E-05	0,00107757	yes
ENSGACG00000012546	groupXVIII:14273882-14278271	control	clone mix	6,69599	137,909	4,36428	-5,01103	5,41E-07	2,76E-05	yes
HSP90AA1 (2 of 2)	groupXVIII:14758906-14763271	control	clone mix	0,284546	12,1101	5,41141	-3,70649	0,00021015	0,00426972	yes
TXLNB (2 of 2)	groupXVIII:15932947-15936267	control	clone mix	8,42045	301,637	5,16277	-4,85353	1,21E-06	5,52E-05	yes
ENSGACG00000013769	groupXVIII:16170571-16176437	control	clone mix	17,6243	0,259757	-6,08426	3,03143	0,00243402	0,0313869	yes
ENSGACG00000005916	groupXVIII:3122754-3129455	control	clone mix	5,44413	0,162234	-5,06856	2,90059	0,00372467	0,0439226	yes
ENSGACG00000010127	groupXVIII:9952406-9957811	control	clone mix	1,65212	17,7656	3,4267	-3,09201	0,00198807	0,0267137	yes
ENSGACG00000010476	groupXVIII:10338804-10341156	control	clone mix	1,60684	20,3058	3,6596	-4,81675	1,46E-06	6,45E-05	yes
ALDH8A1	groupXVIII:11082283-11085044	control	clone mix	54,0471	0,335783	-7,33055	4,57019	4,87E-06	0,000180375	yes
ENSGACG00000011882	groupXVIII:12563265-12564805	control	clone mix	17,522	0	-1,80E+308	-1,80E+308	0,00318018	0,0387864	yes
CRIP2 (2 of 2)	groupXVIII:13111961-13116856	control	clone mix	2,78183	50,6523	4,18652	-3,34787	0,000814347	0,0129932	yes
C6orf58	groupXVIII:15059227-15061479	control	clone mix	111,847	0,776586	-7,17017	5,552	2,82E-08	2,17E-06	yes

TRDN	groupXVIII:15359058-15366820	control	clone mix	1,35121	28,3924	4,39318	-4,67955	2,88E-06	0,000115199	yes
ASB2 (1 of 2)	groupXVIII:16014621-16035554	control	clone mix	0,341125	16,9097	5,63141	-3,67786	0,000235194	0,00468914	yes
ENSGACG00000013782	groupXVIII:16190238-16196307	control	clone mix	0,146639	69,4412	8,88738	-5,56984	2,55E-08	1,98E-06	yes
ENSGACG00000003030	groupXX:279325-280477	control	clone mix	50,9171	1,36813	-5,21788	3,48166	0,00049831	0,00870816	yes
ENSGACG00000003461	groupXX:754241-755023	control	clone mix	2974,3	7,36193	-8,65825	5,46266	4,69E-08	3,36E-06	yes
ENSGACG00000003467	groupXX:759235-760746	control	clone mix	11578,4	11,724	-9,94776	4,73239	2,22E-06	9,23E-05	yes
ENSGACG00000003473	groupXX:762706-763550	control	clone mix	397,148	5,41152	-6,1975	4,50603	6,61E-06	0,000233408	yes
DPYS	groupXX:2879790-2889333	control	clone mix	17,7264	0	-1,80E+308	-1,80E+308	8,28E-06	0,00028259	yes
HPN	groupXX:5115717-5118798	control	clone mix	15,9595	0,851838	-4,2277	3,23877	0,00120046	0,0178164	yes
ENSGACG00000005973	groupXX:5193223-5197836	control	clone mix	3,66531	23,1184	2,65704	-3,42692	0,000610459	0,0102753	yes
CROT (2 of 2)	groupXX:10855977-10863256	control	clone mix	24,6045	10,6015	-1,21466	4,29878	1,72E-05	0,000524368	yes
ENSGACG00000012464	groupXX:13746909-13747781	control	clone mix	12,0529	89,5558	2,8934	-3,31476	0,000917222	0,0143167	yes
TMOD4	groupXX:16341341-16352118	control	clone mix	36,7613	157,081	2,09525	-5,03521	4,77E-07	2,48E-05	yes
ENSGACG00000003435	groupXX:742483-745685	control	clone mix	22,0013	0,523913	-5,39212	2,86061	0,00422824	0,0484796	yes
CNDP1	groupXX:2073451-2081405	control	clone mix	39,708	0,267809	-7,21208	3,79377	0,000148379	0,00319605	yes
TRAK1 (1 of 2)	groupXX:5267356-5288282	control	clone mix	10,5194	21,2859	1,01685	-3,20701	0,00134123	0,0194768	yes
KLHL38 (2 of 2)	groupXX:5618665-5622627	control	clone mix	0,604006	37,0511	5,93881	-4,62027	3,83E-06	0,000147046	yes
ENSGACG00000007038	groupXX:7875940-7881458	control	clone mix	80,2886	0,306683	-8,0323	4,2066	2,59E-05	0,000743096	yes
NR0B2	groupXX:8131362-8132271	control	clone mix	22,4858	0,589334	-5,25379	3,03334	0,00241866	0,0312296	yes
ENSGACG00000007622	groupXX:8915610-8916936	control	clone mix	4,8761	44,2888	3,18314	-3,35639	0,000789668	0,0126754	yes
RBM24 (1 of 2)	groupXX:9845979-9849911	control	clone mix	1,3666	16,3369	3,57947	-2,85355	0,00432338	0,0493158	yes
ABCB4	groupXX:10864559-10876110	control	clone mix	29,6888	0,864696	-5,10158	4,43498	9,21E-06	0,000309099	yes
ENSGACG00000009825	groupXX:11526900-11530777	control	clone mix	51,1364	89,6324	0,80967	-2,97051	0,0029731	0,0367932	yes
ENSGACG00000010757	groupXX:12408944-12417218	control	clone mix	1,3052	15,8729	3,60422	-3,38676	0,00070724	0,0115896	yes
KCNJ14	groupXX:12554115-12556830	control	clone mix	0,421894	16,0918	5,2533	-2,90943	0,00362084	0,0429571	yes
ENSGACG00000012473	groupXX:13875775-13876264	control	clone mix	103,197	5,39543	-4,25753	2,9001	0,00373041	0,043977	yes
ENSGACG00000013326	groupXX:16113437-16115257	control	clone mix	21,0658	99,1525	2,23475	-2,97713	0,0029096	0,036166	yes
BVES	groupXX:17987599-17999153	control	clone mix	8,8708	63,7886	2,84616	-3,36866	0,000755338	0,0122242	yes
PRHOXNB	groupXXI:7564025-7564669	control	clone mix	97,3277	0	-1,80E+308	-1,80E+308	8,85E-05	0,00207617	yes
CTDSPL (1 of 2)	groupXXI:8008623-8027043	control	clone mix	8,54483	38,3097	2,16458	-3,56758	0,000360289	0,00667151	yes
SLC22A13	groupXXI:8131606-8134827	control	clone mix	7,87499	0	-1,80E+308	-1,80E+308	0,000223494	0,00449408	yes
C8G	groupXXI:5566442-5569736	control	clone mix	564,245	1,19664	-8,88119	6,44055	1,19E-10	1,79E-08	yes
HGD	groupXXI:5895781-5903328	control	clone mix	30,7561	0,877576	-5,13121	3,38326	0,000716314	0,0117104	yes
HHATL (2 of 2)	groupXXI:7934263-7940049	control	clone mix	0,732861	61,2875	6,38591	-5,13007	2,90E-07	1,62E-05	yes
ESYT2 (2 of 2)	groupXXI:9244794-9263251	control	clone mix	0,34956	5,66516	4,01851	-3,28613	0,00101574	0,0155568	yes
SMPX	groupXXI:11340439-11348748	control	clone mix	5,23104	105,984	4,3406	-4,38029	1,19E-05	0,000382418	yes
ENSGACG00000014852	scaffold_1014:540-2461	control	clone mix	56,6342	2,01001	-4,8164	4,07691	4,56E-05	0,00119375	yes
ENO3	scaffold_129:41367-46193	control	clone mix	66,3096	525,791	2,9872	-3,19134	0,00141613	0,0203434	yes
ASGR1	scaffold_129:65701-71714	control	clone mix	158,575	0,597279	-8,05254	5,9365	2,91E-09	3,01E-07	yes
TPM3	scaffold_130:156146-165885	control	clone mix	15,1659	512,366	5,07827	-4,22939	2,34E-05	0,000681963	yes
SLC13A5 (2 of 2)	scaffold_132:188482-197401	control	clone mix	59,9029	0,227092	-8,04321	6,29919	2,99E-10	4,05E-08	yes
ENSGACG00000010623	scaffold_133:23068-23662	control	clone mix	7,28838	2272,18	8,28426	-4,81313	1,49E-06	6,56E-05	yes
ENSGACG00000017758	scaffold_137:194756-195795	control	clone mix	0,712969	42,1948	5,88708	-3,17205	0,00151364	0,0214597	yes
ENSGACG00000001073	scaffold_150:33953-42506	control	clone mix	0,772018	27,7456	5,16748	-3,27282	0,0010648	0,0161686	yes
LRRC2	scaffold_150:44307-47718	control	clone mix	1,7103	22,9491	3,74612	-3,57379	0,000351851	0,00654066	yes
TYMP	scaffold_152:16045-20928	control	clone mix	50,6855	3,26436	-3,9567	3,29065	0,000999553	0,0153574	yes
TAT	scaffold_163:104982-110801	control	clone mix	89,3102	1,1171	-6,321	4,53119	5,87E-06	0,00021096	yes
CKMT2 (1 of 2)	scaffold_168:135091-142324	control	clone mix	4,79413	399,298	6,38005	-9,64522	0	0	yes
SYNE2 (1 of 3)	scaffold_184:54617-129383	control	clone mix	0,109702	4,07402	5,21479	-4,74529	2,08E-06	8,75E-05	yes
NEB	scaffold_202:3792-65875	control	clone mix	0,719453	27,7091	5,26732	-8,0303	8,88E-16	3,93E-13	yes
GAPDH (1 of 2)	scaffold_208:92360-97479	control	clone mix	102,905	2655,68	4,68969	-5,46536	4,62E-08	3,31E-06	yes
NEBL	scaffold_213:320-11585	control	clone mix	0,686736	8,04493	3,55025	-3,07621	0,0020965	0,0278716	yes
NRAP	scaffold_213:11976-14125	control	clone mix	1,40674	20,1493	3,8403	-2,90658	0,00365405	0,0432675	yes
ENSGACG00000001261	scaffold_224:14139-22088	control	clone mix	29,7889	0,956872	-4,9603	4,48109	7,43E-06	0,000257758	yes
ENSGACG00000000547	scaffold_229:28614-29289	control	clone mix	3,21962	86,1836	4,74245	-3,08701	0,00202181	0,0270772	yes
ENSGACG00000001742	scaffold_232:44158-79908	control	clone mix	59,1722	8,25419	-2,84172	9,75082	0	0	yes
C3 (8 of 8)	scaffold_251:15264-34678	control	clone mix	24,4008	3,10237	-2,97549	8,22454	2,22E-16	1,07E-13	yes
CAV3	scaffold_27:2646172-2648079	control	clone mix	6,44024	80,5856	3,64534	-4,38397	1,17E-05	0,000377137	yes
MST1P9	scaffold_27:3770786-3781105	control	clone mix	57,3718	0,1732	-8,37176	4,91544	8,86E-07	4,22E-05	yes
PFKM (2 of 2)	scaffold_27:1780298-1786604	control	clone mix	16,1929	157,019	3,27751	-3,41201	0,00064485	0,0107454	yes
PFKFB4 (2 of 2)	scaffold_27:2239007-2249898	control	clone mix	20,5737	32,4191	0,656039	-3,38469	0,000712586	0,0116608	yes
UROC1	scaffold_27:2259743-2266069	control	clone mix	56,0871	0,217983	-8,00731	4,92347	8,50E-07	4,07E-05	yes
FKBP5	scaffold_27:4190407-4197823	control	clone mix	16,0105	300,871	4,23206	-5,16676	2,38E-07	1,37E-05	yes
KBTBD12	scaffold_27:4375346-4379224	control	clone mix	1,10401	25,3488	4,52109	-4,12409	3,72E-05	0,00100584	yes
ITIH4 (2 of 2)	scaffold_27:4635810-4639569	control	clone mix	704,296	12,5583	-5,80946	3,78531	0,00015352	0,00328764	yes
TKT (2 of 2)	scaffold_27:4684887-4693428	control	clone mix	0,575034	17,1268	4,89647	-3,94013	8,14E-05	0,00193685	yes
MDH1 (2 of 2)	scaffold_277:8374-13586	control	clone mix	17,5396	136,397	2,95913	-3,03574	0,0023995	0,031035	yes
ENSGACG00000001260	scaffold_332:1942-12505	control	clone mix	319,286	1,11224	-8,16523	5,31615	1,06E-07	6,81E-06	yes
C3 (1 of 8)	scaffold_332:23002-24274	control	clone mix	253,781	1,58069	-7,32688	4,79289	1,64E-06	7,15E-05	yes
C3 (2 of 8)	scaffold_332:25355-28790	control	clone mix	100,881	1,47385	-6,09692	4,59932	4,24E-06	0,000160231	yes
SLC34A2 (1 of 2)	scaffold_404:16082-20897	control	clone mix	0,400201	17,3005	5,43395	-4,09781	4,17E-05	0,00110654	yes
DHRS7C (2 of 2)	scaffold_54:1178958-1182767	control	clone mix	4,79745	91,23	4,24917	-4,19294	2,75E-05	0,000781284	yes
ENSGACG00000001733	scaffold_609:4313-11347	control	clone mix	387,005	2,50852	-7,26937	5,74021	9,46E-09	8,38E-07	yes
ALLC	scaffold_670:4194-8968	control	clone mix	35,2693	1,09504	-5,00936	4,64349	3,43E-06	0,000133802	yes
ENSGACG00000015248	scaffold_68:838514-847050	control	clone mix	3,31257	58,6687	4,14657	-4,29615	1,74E-05	0,000529666	yes
TNNC1	scaffold_68:530264-533797	control	clone mix	0,849758	411,972	8,92128	-5,34471	9,06E-08	5,94E-06	yes
ENSGACG00000000300	scaffold_69:420454-477489	control	clone mix	3,21149	97,5099	4,92423	-5,00639	5,55E-07	2,82E-05	yes
ENSGACG00000000272	scaffold_69:195180-196587	control	clone mix	14,3081	166,739	3,54269	-4,13517	3,55E-05	0,000966521	yes
TTN	scaffold_69:196694-364852	control	clone mix	0,346999	17,3911	5,64727	-4,51505	6,33E-06	0,000225115	yes
MYLK	scaffold_69:420454-477489	control	clone mix	5,35907	27,8825	2,3793	-3,03713	0,00238843	0,030918	yes
CASQ1 (1 of 2)	scaffold_713:7518-10179	control	clone mix	20,5969	127,002	2,62435	-3,62959	0,00028387	0,00547686	yes
ATP7B	scaffold_74:232711-239646	control	clone mix	9,66025	0,223745	-5,43213	4,0427	5,28E-05	0,00134971	yes
SNRNP70	scaffold_80:215861-221505	control	clone mix	164,659	265,224	0,687726	-3,37908	0,000727284	0,0118546	yes
ENSGACG00000000007	scaffold_89:26629-27862	control	clone mix	123,034	0,443867	-8,11472	6,0121	1,83E-09	2,00E-07	yes
FLNC (1 of 2)	scaffold_90:257636-289663	control	clone mix	0,994525	9,3977	3,24023	-3,91363	9,09E-05	0,00212351	yes
ENSGACG00000001432	scaffold_908:2132-5789	control	clone mix	818,086	2,44616	-8,38559	5,98497	2,16E-09	2,32E-07	yes
F3 (1 of 2)	scaffold_95:201021-206943	control	clone mix	2,33133	23,1798	3,31364	-3,59869	0,000319824	0,00604585	yes