

SUPPLEMENTAL MATERIAL

Journal of the American Aging Association

ROLE OF EPIGENETICS IN HUMAN AGEING AND LONGEVITY: GENOME-WIDE DNA METHYLATION PROFILE IN CENTENARIANS AND CENTENARIANS' OFFSPRING

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Figure S1

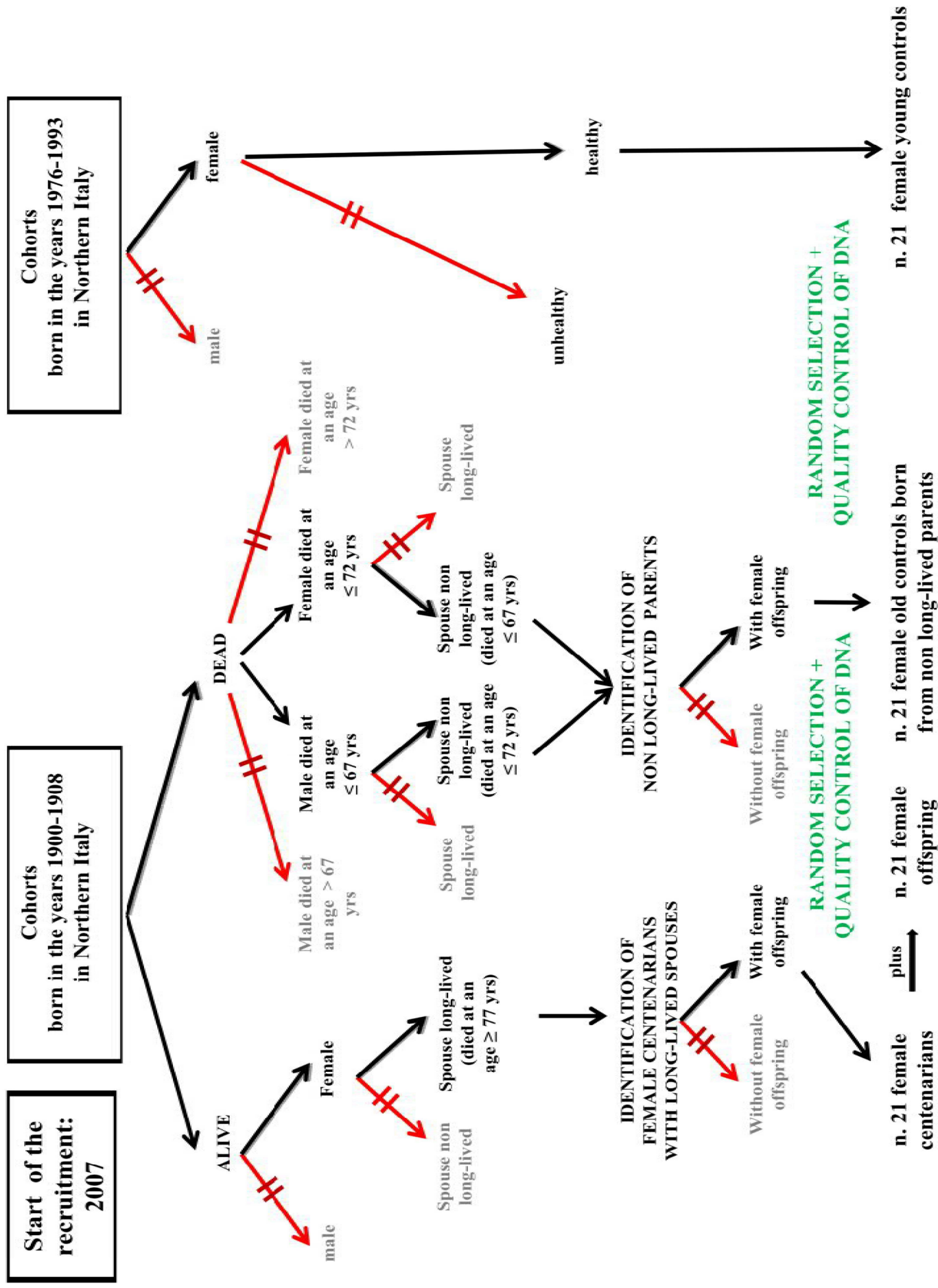


FIGURE S2

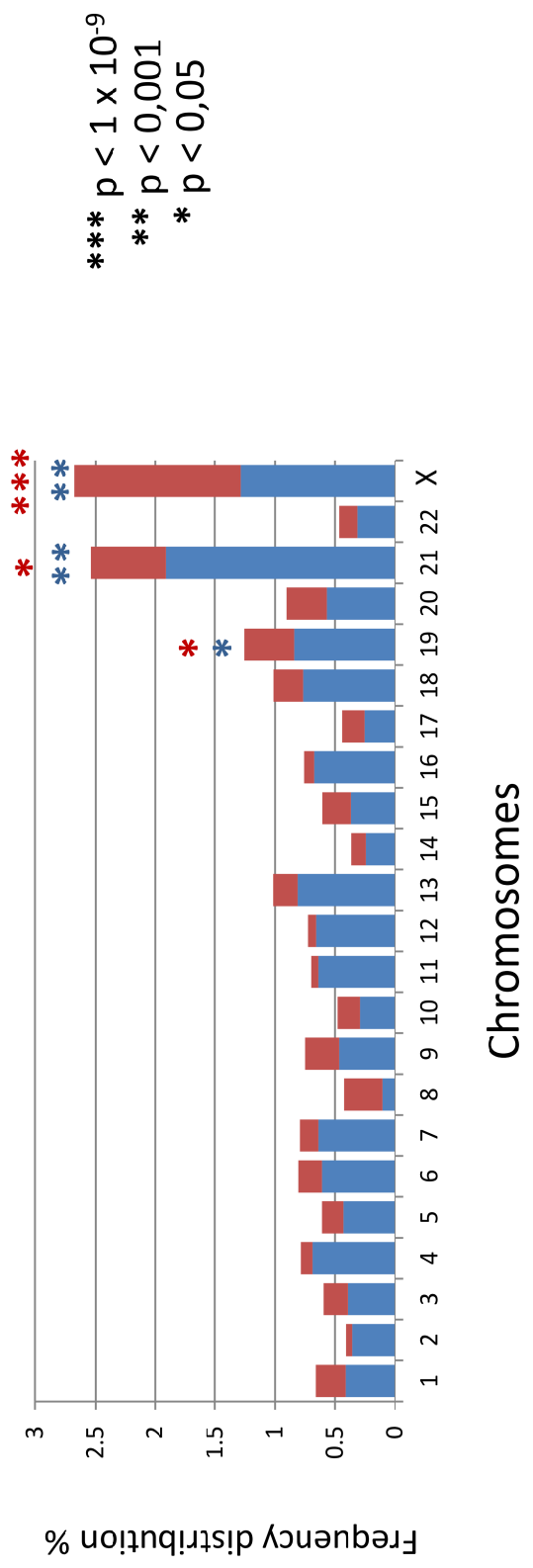
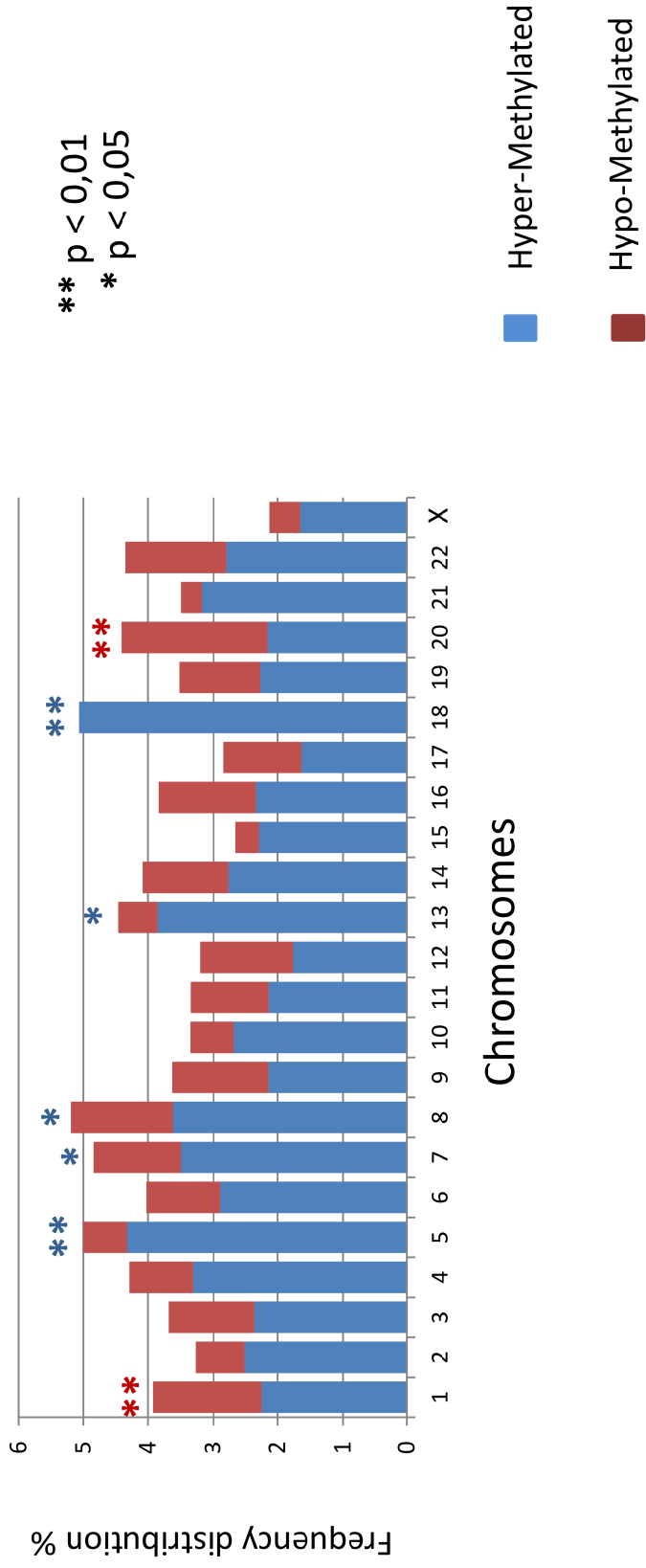


Table S1. List of 709 CpG loci concurrently and significantly hypermethylated in centenarians, centenarians'offspring and offspring of non long-lived parents vs young controls. Columns indicate: Illumina Probe ID (ILMNID), NCBI gene symbol of associated gene (SYMBOL), chromosome localisation (CHR) and map informations (MAPINFO). For each probe we reported AVG beta in each group, and DiffScore, that indicates its level of significance vs young controls.

ILMNID	SYMBOL	CHR	MAPINFO	YOUNG CONTROLS.AVG_Beta	CENTENARIANS' OFFSPRING.AVG_Beta	CENTENARIANS' OFFSPRING.DiffScore	OFFSPRING OF NON LONG-LIVED PARENTS.AVG_Beta	OFFSPRING OF NON LONG-LIVED PARENTS.DiffScore	CENTENARIANS.AVG_Beta	CENTENARIANS.DiffScore
cg00002083	EPB41L3	18	5533801	0.1037196	0.2465953	345.9589	0.2238209	343.9177	0.3429643	356.9969
cg00003047	C1orf188	1	6191377	0.1830436	0.2595659	67.30103	0.2262654	19.65343	0.3026838	356.9969
cg00059225	GLRA1	5	15120450	0.3100203	0.4008484	0.12017	0.4000643	79.35060	0.4554179	356.9969
cg00090147	GATA4	8	11599776	0.07699681	0.1097613	22.43563	0.1052215	15.89458	0.1485177	116.781
cg00107187	FLJ42486	14	104442043	0.108179	0.1830319	94.06365	0.1843359	96.44795	0.2433812	356.9969
cg00201234	FBX12	3	1356598	0.04874061	0.09484001	59.40055	0.06135988	28.90079	0.1330278	356.9969
cg00263760	VAX1	10	118887356	0.0702091	0.1003388	19.95589	0.09535724	13.15087	0.1279872	83.99036
cg00332226	UNQ739	7	49794309	0.09928816	0.1463998	40.09083	0.137474	25.08844	0.1962313	356.9969
cg00399483	DCC	18	48122376	0.135937	0.1902636	42.19709	0.176813	22.48832	0.2575792	356.9969
cg00468146	ID4	6	19946190	0.1443796	0.2199524	78.38698	0.2039284	47.4999	0.27852	356.9969
cg00489401	FLT4	5	190008481	0.11081	0.1738242	66.18493	0.1589961	37.42194	0.2245436	356.9969
cg00503840	DLX5	7	9848445	0.1589734	0.2086402	345.9589	0.2272261	77.91346	0.2987374	356.9969
cg00509070	PAXO	14	38200064	0.1304173	0.1647743	18.27733	0.1854554	16.71048	0.2159037	115.0004
cg00513220	MOSC2	1	218989746	0.04936551	0.08455218	46.0495	0.07074384	18.45832	0.1262772	356.9969
cg00548268	NPTX2	7	98083766	0.3567565	0.4498507	67.19811	0.4303972	39.38696	0.5544743	356.9969
cg00564163	STEAP4	7	87773915	0.1395559	0.1963643	45.40957	0.1895469	33.78411	0.2694166	356.9969
cg00565988	TPF3	1	3558072	0.1383988	0.2504936	345.9589	0.2334981	125.5542	0.3486267	356.9969
cg00648140	ARSD	X	2857661	0.1161733	0.1406843	23.24054	0.1806083	23.09327	0.1689094	61.38144
cg00662556	GALR1	18	73092352	0.1877942	0.2315527	20.18571	0.2401823	29.17411	0.292103	133.3159
cg00884979	SLC24A3	20	19141824	0.09055097	0.1438815	54.97122	0.1255304	22.38145	0.1739772	140.0187
cg00891278	CCDC37	3	127596474	0.08068661	0.1211678	34.01453	0.1185995	28.87741	0.1742096	356.9969
cg00911351	PCDHGB4	5	140747439	0.1054686	0.1596223	51.00735	0.1540725	39.76477	0.2665049	356.9969
cg01120761	GLEC4C	12	7794437	0.7120936	0.7881668	31.81886	0.7630478	28.86253	0.7466934	14.89856
cg01185154	F3	1	94773317	0.1224331	0.2232587	28.70991	0.224076	20.51032	0.2416659	48.40326
cg01192900	BTG4	11	110888878	0.0818556	0.1142004	20.8916	0.1122961	17.98529	0.1320243	59.37128
cg01353448	C7orf16	7	31693437	0.5469052	0.6053257	24.27126	0.5928528	13.42431	0.637411	68.39827
cg01366419	WBSRC17	7	70230607	0.06467049	0.1209569	75.08253	0.1046721	37.31326	0.1751613	356.9969
cg01410472	CRISPLD1	8	76059630	0.03824839	0.07560202	44.13685	0.06756757	26.13106	0.1132123	356.9969
cg01530101	KCNQ1DN	11	2847674	0.1939044	0.2954445	112.2428	0.253817	57.51321	0.462471	356.9969
cg01530588	RHPN2	19	3824790	0.05026989	0.08743435	35.22188	0.0863264	34.94523	0.1088132	104.5791
cg01610488	TRPA1	8	73159824	0.0254792	0.05153741	16.25311	0.052751	17.93489	0.07860559	94.40548
cg01615704	MALL	2	110230685	0.1148031	0.2029855	124.3048	0.2029855	943.9177	0.2855446	356.9969
cg01643580	KCNK3	2	26789903	0.1889419	0.247915	38.46769	0.2326848	19.60093	0.255147	56.87874
cg01805282	EYA4	6	13360547	0.08276454	0.142324	72.21758	0.1437913	75.31274	0.1650026	356.9969
cg01805540	CACNB2	10	18489755	0.01754042	0.03690774	14.72677	0.0378249	15.94102	0.07162578	122.9798
cg01824804	LOX	5	12441377	0.06092773	0.08717322	16.26747	0.08561418	13.88404	0.1117073	71.79409
cg01830294	WNT2	12	11875928	0.1124452	0.1834478	83.44378	0.1844372	48.95111	0.2619822	356.9969
cg01839464	DCC	18	48122475	0.0570681	0.1004403	48.6805	0.09215529	30.73145	0.1771084	356.9969
cg01946574	PTPRM	18	7558186	0.04415753	0.07276442	23.73957	0.06659186	13.66891	0.1137529	356.9969
cg02008154	TBX20	7	35260062	0.0342688	0.06571936	32.67156	0.05646088	15.18087	0.09679496	131.9527
cg02064106	C6orf118	6	165642848	0.04437475	0.0745578	26.48452	0.06973205	17.93718	0.1360039	356.9969
cg02065507	TRIP10	19	6690192	0.5007697	0.5705259	34.92173	0.5581263	21.86305	0.6196202	125.9381
cg02148834	TRAF3	5	10794485	0.1887958	0.2424643	68.69899	0.2313049	42.99221	0.2959987	356.9969
cg02154186	PNMA2	8	28427270	0.1046389	0.1654421	62.55444	0.160494	53.58973	0.236818	356.9969
cg02194876	EPHA8	1	22762865	0.05280737	0.0918343	40.88748	0.08973596	35.52229	0.1423159	356.9969
cg02205094	ONECUT2	18	53254351	0.08942147	0.1443737	58.75301	0.1465642	62.77501	0.2097671	356.9969
cg02265318	MOSC1	1	219027162	0.03339828	0.07435572	55.88121	0.06344078	29.21899	0.122521	356.9969
cg02325925	GRM7	3	6878153	0.2024601	0.2968007	76.3865	0.2639755	38.67755	0.333139	356.9969
cg02337714	DG5	5	17868988	0.1887958	0.2424643	68.69899	0.2313049	42.99221	0.2959987	356.9969
cg02409351	CART1	12	84198153	0.04817843	0.07805327	24.8028	0.07425106	18.15831	0.1027811	356.9969
cg02489552	FLJ40365	19	14982531	0.4687786	0.5599118	62.56156	0.5548135	54.13176	0.5746261	96.34354
cg02497758	MAFB	20	38750608	0.08159045	0.1447949	81.76941	0.1524618	10.56511	0.218475	356.9969
cg02519218	CHFR	12	131934359	0.7883109	0.8353679	34.47505	0.8378667	37.91928	0.8509482	76.44899
cg02590345	PRG-3	9	102830780	0.07307483	0.1061118	23.73814	0.09950652	14.22715	0.1657701	356.9969
cg02613366	FXR3	11	6862859	0.1189958	0.1887958	68.69899	0.1808642	35.98722	0.2591383	356.9969
cg02620013	MLNR	13	48692682	0.192496	0.258307	47.74123	0.2644019	56.39636	0.332438	356.9969
cg02624129	SNX19	11	130291440	0.1074288	0.1404128	17.60402	0.1385967	15.1668	0.1609655	56.1484
cg02624705	DCC	18	48122676	0.05230924	0.09320725	45.40957	0.0813233	21.74127	0.1673956	356.9969
cg02757432	GPR26	10	125416038	0.2024236	0.2884938	46.27553	0.2606018	34.34783	0.333334	356.9969
cg02844545	GCM2	6	10990299	0.1612136	0.2278357	56.12917	0.2273762	54.37157	0.2964909	356.9969
cg02854288	FHIT	3	61211961	0.0531373	0.0719147	14.72698	0.07338815	13.34067	0.1113826	98.11217
cg02919422	SOX17	8	5553097	0.1311225	0.2096452	90.56042	0.1952758	60.12596	0.2709822	356.9969
cg02949456	NEFH	22	28206534	0.3119534	0.3835489	40.62988	0.39744	58.78839	0.4298958	127.4081
cg03000846	RAC3	17	77583552	0.3493271	0.4129453	29.4464	0.3978546	15.54996	0.4283196	54.63992
cg03026462	FOXA1	14	37134241	0.02130686	0.04256215	17.04035	0.04493037	20.87672	0.08026647	137.0993
cg03138091	OSMR	5	38882297	0.05935208	0.1313639	124.3048	0.1145495	75.40536	0.153174	356.9969
cg03160135	VGLL2	6	117663614	0.1017245	0.1468012	36.6796	0.1330749	16.50153	0.1717481	95.81762
cg03251079	HMGAC2	12	8453032	0.0485145	0.08311868	31.60365	0.0811242	21.70941	0.1208023	356.9969
cg03257423	ZNF228	19	49552660	0.1870638	0.2391785	29.70893	0.2322293	21.24894	0.2443666	42.72662
cg03258472	CRB3	19	6141949	0.447185	0.4947363	14.05914	0.4950003	14.21538	0.5774776	356.9969
cg03355526	ZNF454	5	178301021	0.1585148	0.2588111	126.8282	0.2580333	124.1712	0.3661806	356.9969
cg03365437	ALDH1A2	15	58145166	0.07847811	0.1491558	103.4532	0.1418174	83.53489	0.2047241	356.9969
cg03469654	KIAA1944	12	128953814	0.06480414	0.0962482	23.52023	0.09194982	16.81299	0.1588749	356.9969
cg03504849	KCNJ14	11	2927418	0.07198998	0.10792794	41.81608	0.10792794	24.33332	0.1518337	356.9969
cg03544320	CRMP1	4	5945592	0.1717747	0.345589	34.5589	0.3276098	34.31797	0.5183777	356.9969
cg03552103	40A22	2	109730291	0.209815	0.2615997	26.59616	0.2482327	13.34067	0.2844464	65.84077
cg03554552	PPP1R13L	19	50599886	0.1167659	0.1844846	73.49419	0.1750455	53.83677	0.2419063	356.9969
cg03567830	NTR3	20	60810316	0.0486228	0.1066273	91.9276	0.08251549	31.28369	0.14778	356.9969
cg03664992	BMFBFA	1	39729880	0.05270652	0.1069888	78.08353	0.08690518	34.87819	0.1231294	137.0993
cg03692712	LOXL1	15	7200610	0.0485145	0.08311868	31.60365	0.0811242	21.70941	0.1208023	356.9969
cg03724463	CKK	3	42281528	0.1449895	0.194167	32.52631	0.1888779	24.79257	0.285115	356.9969
cg03748474	FLJ42486	14	10444227	0.08943477	0.1847147	345.9589	0.1854039	343.9177	0.3040348	356.9969
cg03755123	UTF1	10	134893498	0.1042894	0.153083	41.45416	0.1393522	20.17363	0.1830121	116.1857
cg03760483	ALOX12	17	6840021	0.4327002	0.4952255	26.56881	0.4941481	24.88215	0.5289948	78.35742
cg03762453	FLJ90575	4	7094836	0.3457804	0.4222689	44.81948	0.4097907	29.2173	0.4733632	

cg04943986	NR2F2	15	94674872	0.03742087	0.05881792	13.80595	0.05888719	13.66342	0.084776	78.83067
cg04953257	PLAC2	19	511915	0.358434	0.413901	20.55855	0.3547072	13.7207	0.4577715	85.03325
cg05071677	OR2V2	5	180514566	0.774358	0.8210004	30.87133	0.8110485	16.86691	0.8125611	23.79645
cg05158615	NPY	7	24290084	0.07575507	0.1027549	14.90047	0.1054485	16.8329	0.1327992	78.65313
cg05266781	IRX5	16	53522993	0.1153342	0.1785673	64.94033	0.1663723	41.05763	0.2192224	356.9969
cg05373457	KCNS2	8	99509124	0.1586654	0.2239179	54.54021	0.2052961	26.14511	0.2996148	356.9969
cg05380982	KCNJ6	21	38210248	0.1043541	0.1526606	40.65909	0.1378313	18.22367	0.1959939	356.9969
cg05472874	SUL1T41	22	42589512	0.03410842	0.0726004	66.48705	0.0626231	86.87353	0.1447877	356.9969
cg05488832	ABID9	19	15304174	0.1855281	0.256564	58.84507	0.1791771	42.4259	0.2383489	356.9969
cg05595345	ARRDC4	15	98305177	0.03568664	0.07816295	58.75301	0.09002466	92.46243	0.1474889	356.9969
cg05670348	LARGE	22	32646316	0.03897029	0.0959262	93.97569	0.0884783	71.76256	0.1486636	356.9969
cg05674944	SLC30A2	1	26244877	0.05469781	0.09493326	42.81017	0.08117611	17.4704	0.1149332	102.6714
cg05675373	KCNC4	1	110555780	0.05408006	0.09017757	34.56684	0.08821253	29.97945	0.1493389	356.9969
cg05764376	THAP10	15	68971644	0.02404737	0.05024135	25.50885	0.05250539	29.54331	0.106053	356.9969
cg05839236	NRK1	5	32747954	0.05980747	0.09489742	45.02318	0.08248519	21.11397	0.1347922	356.9969
cg05961595	APEX2	X	55043210	0.3394047	0.3859261	14.66138	0.3959712	22.38286	0.420635	85.45077
cg06092815	SKIP	2	228754650	0.2399937	0.3009683	34.18821	0.2832834	15.61036	0.3450294	116.3049
cg06147863	SP11	11	47356689	0.1434831	0.1955656	37.04292	0.1819675	18.85444	0.2246562	99.97074
cg06187947	GULP1	2	188865287	0.06745885	0.1113653	45.20123	0.1029895	28.45634	0.1527686	356.9969
cg06263495	ASCL2	11	2248580	0.06583132	0.1245574	80.63603	0.1135254	53.1445	0.19844	356.9969
cg06268894	CELSR1	22	48591307	0.1477191	0.2021057	34.53589	0.3211659	34.9177	0.4715517	356.9969
cg06291867	HTR7	10	92607142	0.1050844	0.1656422	63.69999	0.1696127	71.76256	0.23152	356.9969
cg06391468	SOX9	17	67629125	0.156036	0.2274875	66.10519	0.2064578	31.34768	0.3252977	356.9969
cg06493386	TRPA1	8	73150351	0.09949005	0.14441	36.28698	0.1331296	19.20684	0.1548756	62.99731
cg06493994	SCGN	6	25760581	0.05548509	0.1135101	86.35611	0.1115784	80.58109	0.1659624	356.9969
cg06498267	HGN1	5	45731679	0.07791603	0.1265631	50.74826	0.1221586	40.69715	0.1748752	356.9969
cg06527160	KCNK3	19	55523713	0.0684939	0.0989105	59.9937	0.06898258	36.10732	0.2070554	356.9969
cg06575478	SOX1	13	111769787	0.1870304	0.2629462	65.34415	0.2697437	77.24375	0.3414745	356.9969
cg06713098	IGFBP3	7	45926892	0.05564455	0.1256808	122.6092	0.1255197	120.9217	0.183866	356.9969
cg06744574	C1orf165	1	49014946	0.02234218	0.0551074	41.30196	0.06474753	67.60928	0.121092	356.9969
cg06781209	FADS2	11	61351573	0.07166253	0.09944863	18.50534	0.1009633	18.16099	0.1307981	86.60954
cg06810847	CRAMP1L	16	1600595	0.2157528	0.2738189	33.42354	0.2050511	18.47746	0.3180712	117.9622
cg06904813	PNWAA6	X	19199896	0.7335941	0.7659854	43.51945	0.7379726	17.01169	0.781624	27.86257
cg06942110	INT1	7	1511911	0.5549548	0.6250881	37.64114	0.6307929	43.89805	0.6490921	62.17482
cg06954481	GBX2	2	236741236	0.04009071	0.07461951	36.8688	0.07555471	37.81327	0.1319244	356.9969
cg07015629	ERBB4	2	213111457	0.02592903	0.04708511	15.72476	0.04784284	16.67756	0.0799997	112.1546
cg07028533	CNTNAP2	7	145444372	0.04894852	0.08011342	26.86885	0.07610241	19.46229	0.1291127	356.9969
cg07103493	SLC27A6	5	126329131	0.06936118	0.1171822	52.74544	0.1168263	50.82102	0.1641235	356.9969
cg07269592	LPA	6	16102812	0.2483986	0.3198631	48.81945	0.2489918	24.82366	0.3628672	356.9969
cg07271264	MYOD1	11	17897553	0.0960519	0.1572959	69.20882	0.1450991	45.09281	0.2219143	356.9969
cg07442479	GDNF	5	3878526	0.1178458	0.1613192	29.62859	0.156296	22.22721	0.1991946	114.2404
cg07533148	TRIM58	1	246087435	0.0213269	0.04628451	23.96069	0.04877245	28.49517	0.09374505	356.9969
cg07536847	PAX7	1	18829819	0.05651977	0.08701278	23.66128	0.08045493	13.62488	0.1033738	64.44447
cg07564555	ANKRD38	1	62657350	0.02495706	0.04468419	13.74117	0.04691462	16.94682	0.07310201	92.69056
cg07570142	MOXD1	6	13278414	0.03932362	0.07338711	36.16616	0.06708732	23.01295	0.1096125	356.9969
cg07572341	FOXP2	22	22511942	0.05901942	0.14241349	40.31489	0.12594674	16.73174	0.1739464	356.9969
cg07611334	C2orf98	20	275811	0.0594569	0.09010877	23.1856	0.08608822	16.76734	0.11558	87.01244
cg07621046	C1orf82	10	118419648	0.2178773	0.2841501	44.02258	0.2783255	35.16254	0.3515889	356.9969
cg07640473	SEMA3F	3	50168236	0.05431185	0.08233942	20.20564	0.08754704	14.39406	0.1178418	113.1692
cg07651242	ADCY1	7	45581245	0.0748084	0.1141327	33.74197	0.1117081	28.75271	0.1543588	140.0187
cg07675169	C2orf98	20	61356707	0.06474462	0.09010887	14.53176	0.08927295	13.17141	0.1101314	96.98413
cg07684796	DKF1	10	53741215	0.0501017	0.07184223	48.84223	0.0671469	29.35524	0.1486624	356.9969
cg07703401	HBOJ1	16	170341	0.0465196	0.06939889	13.65103	0.07078964	15.85138	0.1141153	134.2318
cg07752420	CDKN2A	9	21958681	0.1012669	0.134247	18.45938	0.1347876	22.09069	0.1998476	356.9969
cg07758904	TSCOT	9	114692645	0.04836053	0.08842975	45.4133	0.09500159	60.28767	0.1196622	356.9969
cg07846220	LAMA1	18	7107680	0.04570708	0.123113	34.56589	0.09070771	74.93978	0.1212963	356.9969
cg07851192	KCNK2	18	75725901	0.8960943	0.9241205	26.52876	0.917299	13.00637	0.9576307	77.48681
cg07935568	MLL2	20	4892123	0.0501191	0.0711191	36.74455	0.0716489	25.9354	0.1991481	356.9969
cg08023692	TDFP3	X	132179880	0.7867126	0.8319894	31.05233	0.831883	30.07281	0.8292844	32.36753
cg08072716	GPR62	3	51964732	0.4736551	0.5379738	28.75278	0.5227023	14.98523	0.5565724	58.4246
cg08109815	NMBR	6	142451524	0.2374444	0.2841865	19.13772	0.2855275	19.95094	0.3442705	120.847
cg08185241	GUS2	1	207915487	0.09742521	0.189223	34.53589	0.1727392	101.0091	0.2656181	356.9969
cg08185661	SYT19	11	7230704	0.0580827	0.1167633	93.28715	0.1299026	34.93717	0.2177014	356.9969
cg08198362	HRV3	20	6922104	0.06291445	0.07227393	48.71553	0.03722723	46.07716	0.1311021	356.9969
cg08209133	SLC10A4	4	18160381	0.1544539	0.235259	85.28098	0.2296252	73.54063	0.2832149	356.9969
cg08261094	SFRP4	7	37922801	0.05705294	0.08414686	18.24109	0.08106567	13.64333	0.1230521	118.1345
cg08319591	UCHL1	4	40954040	0.03038003	0.05676849	25.99688	0.05618827	22.01959	0.1028829	356.9969
cg08321346	ANKMY1	2	241145656	0.178975	0.2641126	80.5152	0.2637741	83.78105	0.3576872	356.9969
cg08328671	BKBR2	14	95741015	0.06032842	0.08768418	17.95468	0.08532031	14.36257	0.1114226	72.97694
cg08349906	FLJ3599	16	1539465	0.1428346	0.2262349	48.78459	0.1286149	15.76140	0.2449201	356.9969
cg08393029	CDKN2B	9	21958683	0.1288329	0.1718689	26.64746	0.1685419	18.68245	0.2187174	131.9527
cg08422999	KCNIP1	5	169863670	0.03760169	0.06222336	16.68995	0.05903652	13.40666	0.08435335	76.94466
cg08432727	SOX11	2	5749173	0.08192493	0.134606	57.35492	0.1214256	31.08693	0.2115536	356.9969
cg08441170	MYO3A	10	26263106	0.04120277	0.09150114	75.83916	0.08337194	53.30772	0.159198	356.9969
cg08441806	NKX6-2	10	134449139	0.1599098	0.2861443	34.53589	0.2472436	95.97541	0.3543873	356.9969
cg08451957	FOXO4L1	2	113972876	0.5389013	0.6024269	29.22349	0.5444458	20.73699	0.6416287	96.69946
cg08487211	ACTL16	7	108407918	0.10400918	0.13940718	85.77991	0.08865756	51.78892	0.1787105	356.9969
cg08575537	EPO	7	100156562	0.1574308	0.2563035	25.38232	0.2487243	105.9037	0.3551106	356.9969
cg08586737	GCC1	7	127013185	0.2841924	0.3401739	124.9512	0.3305798	16.07162	0.3702609	71.58888
cg08642068	SPAG4L	20	31055437	0.04027171	0.0562812	82.42902	0.4629599	24.13297	0.5764878	356.9969
cg08668790	ZNF154	19	62912474	0.05196012	0.09656136	54.10553	0.07750574	16.68808	0.1281489	356.9969
cg08731300	PZD8	10	35970331	0.02982623	0.06000705	33.49139	0.05429116	19.95094	0.0626218	115.789
cg08789421	GNAQ	9	7295194	0.08114643	0.10848162	48.84223	0.08640619	28.68669	0.1346558	356.9969
cg08811702	FP96A012	4	41058077	0.02818232	0.05285692	21.22748	0.05059912	16.93452	0.08011944	102.0996
cg08849574	ZNF134	19	62817765	0.07164455	0.1046237	23.94422	0.1085124	29.52559	0.1389004	108.8882
cg08900043	HOXC10	12	52665163	0.04951442	0.07282063	14.29139	0.07476718	16.71948	0.1088695	104.6904
cg09030119	ZNF285	19	49997183	0.1639332	0.2276478	90.743				

cg11102782	ISYNA1	19	18410136	0.08883338	0.1254266	25.59518	0.117963	15.23449	0.1451777	69.83736
cg11126134	FLJ1934	13	30373031	0.092923	0.179234	345.9589	0.174709	120.1572	0.224711	356.9989
cg11260422	FOXA1	14	37133863	0.05027954	0.08576707	34.75447	0.07627659	17.64427	0.1170584	127.4081
cg11279021	ETV1	7	13959215	0.09063222	0.1455996	41.13561	0.1312746	18.83208	0.1534848	63.66089
cg11323198	CDH8	16	60627307	0.05906153	0.09405243	30.77613	0.08999724	23.09327	0.1292515	129.0572
cg11368643	PCDH15	5	140605243	0.1577149	0.204044	26.59616	0.2058766	28.18463	0.2610503	156.9989
cg11376198	AFAR3	1	19473317	0.2476481	0.2891927	14.17465	0.2882534	13.13234	0.3527001	114.2849
cg11377136	PKDREJ	22	44597624	0.1995105	0.3059626	345.9589	0.3110105	343.9177	0.4627133	356.9989
cg11389172	SLC18A3	10	50483043	0.02480333	0.04863306	22.21824	0.0456419	14.84019	0.104216	356.9989
cg11428724	PAX7	1	18830219	0.04533434	0.0700859	17.15441	0.07705037	28.32843	0.1179391	356.9989
cg11438428	PTF1A	10	23521600	0.05908795	0.09429611	31.14947	0.08740824	19.19021	0.1258569	356.9989
cg11492856	CAPN7	3	15221591	0.8414139	0.8702374	15.6922	0.8746538	21.77221	0.8776724	33.26476
cg11584690	ZNF574	19	47268036	0.2300278	0.3017989	50.12183	0.2854448	27.91789	0.3380983	126.8071
cg11594137	EDG3	9	90795801	0.1286049	0.196869	73.35222	0.1755427	31.60928	0.2170284	125.5542
cg11612345	SMOC2	6	165858304	0.09041307	0.136209	40.47233	0.1186656	14.05264	0.1970719	356.9989
cg11668844	MCF2L	13	112703623	0.07876197	0.1408604	80.74265	0.1245558	43.32532	0.1348304	74.56334
cg11688923	ADAM12	10	12806926	0.04288305	0.09049922	67.05535	0.08336229	48.0083	0.1463263	356.9989
cg11732619	SLIT3	5	168660654	0.03496702	0.07090076	42.40217	0.06594132	30.52433	0.1159453	356.9989
cg11743470	GCNT4	5	74363033	0.6497946	0.7134263	37.21424	0.7209092	47.12486	0.696525	21.53979
cg11810837	ARMCX5	X	101740932	0.2402017	0.2829399	15.5099	0.2912102	22.4903	0.2779361	15.3995
cg11832722	DSC3	18	28577038	0.06864729	0.1366296	105.2228	0.1307243	37.09701	0.2364209	356.9989
cg11846956	KLK10	19	56212194	0.04029432	0.08905146	72.14037	0.06934632	25.00456	0.1243956	356.9989
cg11934695	ADRA1D	20	4178092	0.05003598	0.08856	41.13561	0.07696894	19.03799	0.1318201	356.9989
cg11935147	PDE4DIP	1	143787188	0.1183079	0.1604774	27.63494	0.1486269	13.13561	0.1981331	110.1242
cg11946503	NEUROG1	5	134898413	0.05441752	0.09038914	34.20336	0.08122637	17.97828	0.116345	108.0867
cg11965370	HNT	11	131286156	0.06431555	0.1413124	345.9589	0.1264056	90.04905	0.208744	356.9989
cg11981999	GATA4	8	11605935	0.0872967	0.1543213	58.21478	0.1721455	43.29659	0.2118614	356.9989
cg11983754	ERBB2	17	35110039	0.1541416	0.2173639	52.35905	0.2070746	35.13463	0.2838505	356.9989
cg12024906	HKR1	19	42517519	0.337298	0.4573107	118.2765	0.4470002	96.55791	0.5048913	356.9989
cg12044689	HIALT1	9	96243178	0.8904812	0.920314	28.78044	0.9135641	14.92927	0.9120293	16.85268
cg12078929	SERHL	22	41226632	0.03143178	0.05564856	19.50598	0.06297284	13.10307	0.1185829	356.9989
cg12111714	ATP2A2	13	24941472	0.2087997	0.3085012	104.7582	0.2862239	32.62358	0.4107092	356.9989
cg12128017	EPHA10	1	38093356	0.05688337	0.08931569	34.24171	0.06188319	16.8595	0.132285	356.9989
cg12163132	TBX2	17	56830699	0.2771434	0.3411491	34.24171	0.3239591	16.68967	0.3385474	37.18181
cg12163490	CDH11	16	63713342	0.06449824	0.1348903	114.6034	0.1246142	64.58897	0.2373656	356.9989
cg12164282	PXDN	2	1727119	0.06486631	0.1698266	345.9589	0.1471305	343.9177	0.2765905	356.9989
cg12259537	TRAF6	19	63206506	0.07588945	0.1068673	20.09995	0.1170196	35.61578	0.1319625	76.18723
cg12277666	TDRD5	1	177827493	0.1036388	0.1572827	50.74343	0.1625388	60.1588	0.218145	356.9989
cg12300353	KCTD8	4	44144175	0.02949806	0.04914836	14.93491	0.0387939	13.78917	0.07527964	121.7181
cg12313389	RBPA	10	95350726	0.03262874	0.07269342	54.11488	0.0626537	37.13822	0.120729	356.9989
cg12373771	CECR6	22	15981381	0.05362022	0.0855722	47.08142	0.08857784	31.60928	0.1333308	356.9989
cg12374721	PRAC	17	44154639	0.08557584	0.114058	15.27193	0.1166461	18.13251	0.1822504	356.9989
cg12420104	DMRT3	9	967109	0.04803745	0.08028657	29.19058	0.08053535	28.91691	0.1306551	356.9989
cg12424540	CHGA	14	92459644	0.05173275	0.09595008	53.3099	0.09255621	44.30722	0.192654	356.9989
cg12448933	RAB37	17	70178873	0.0778945	0.1157534	30.50138	0.1066807	16.5477	0.1774274	356.9989
cg12457173	VIRP	6	24231416	0.2181014	0.1739425	41.03509	0.1739425	37.49029	0.251118	45.9309
cg12459502	BCL2	18	59055217	0.3855427	0.4023209	14.83554	0.4028552	14.81776	0.4766291	128.5149
cg12497564	RBP1	3	140740985	0.04408865	0.08806494	56.98462	0.09151608	65.29526	0.1601334	356.9989
cg12563178	PLXDC2	10	20145647	0.02542161	0.05474115	31.66888	0.04858431	18.86069	0.09455719	356.9989
cg12582959	HSTU9303	19	60851011	0.2146484	0.2885618	55.88121	0.2693102	28.65679	0.3349541	356.9989
cg12649441	MGC52057	2	149895469	0.07296348	0.205226	345.9589	0.189603	343.9177	0.2918105	356.9989
cg12613383	PLS1	1	24301496	0.1320196	0.1394441	27.55173	0.1394441	22.42526	0.2128508	37.61532
cg12629325	PCDHAC1	5	140286642	0.03160786	0.05409666	16.57333	0.05318932	14.81204	0.1141032	356.9989
cg12645220	PAK7	20	9767272	0.06117712	0.09516023	28.29187	0.09052525	20.29351	0.1387334	356.9989
cg12756687	DRD2	11	112851537	0.1121279	0.2175579	24.7316	0.2229116	30.54471	0.2581083	100.596
cg12770741	NXN	17	830526	0.5793966	0.6481642	37.52487	0.6302227	18.02371	0.7044937	356.9989
cg12782180	LFP	1	127688168	0.4800679	0.5771186	72.33786	0.5773281	72.37287	0.6661712	356.9989
cg12799905	APTX2	7	8952918	0.1320196	0.2582978	345.9589	0.1526891	343.9177	0.350226	356.9989
cg12802039	OCA2	15	28018007	0.09533465	0.128633	19.78532	0.1290263	19.84936	0.1511071	65.6167
cg13067215	CGI-38	16	65984786	0.1026862	0.1392231	22.82622	0.1350335	17.13896	0.1710344	90.86047
cg13099330	RBP1	3	140740489	0.09546445	0.1540962	63.84524	0.1394514	34.80608	0.2137867	356.9989
cg13192155	EKAS	X	48570887	0.4796873	0.5580249	50.20751	0.5348353	22.90211	0.5791955	92.28996
cg13265789	UNC5C	4	96889607	0.04673636	0.07498578	24.03222	0.07399917	22.05113	0.1208737	356.9989
cg13344740	DLX3	7	9870495	0.1154025	0.1945923	48.3083	0.1154025	39.85831	0.203073	120.3383
cg13384396	ADCY5	3	12465367	0.1477752	0.1946098	28.77105	0.1809171	13.15087	0.2286104	97.26136
cg13398291	SFRP1	8	41285326	0.03010376	0.0619587	35.33081	0.0548807	20.44233	0.0952197	356.9989
cg13434842	GATA4	8	11605935	0.0872967	0.1543213	58.21478	0.2892488	61.42893	0.4263387	356.9989
cg13435792	C12orf46	12	14983701	0.5950412	0.6418314	15.54099	0.6450163	17.87691	0.6707441	55.40609
cg13449778	C1orf76	1	177978921	0.0296229	0.05602793	24.05112	0.05225755	16.94882	0.0836552	124.1072
cg13460409	DSGCR	21	3730146	0.11465	0.196457	16.10793	0.1872121	34.91177	0.213861	356.9989
cg13488201	ADAM12	10	12806923	0.07156545	0.1393748	100.8803	0.1228854	58.54298	0.2037331	356.9989
cg13494498	IUB33	16	89517115	0.0980083	0.1354987	25.00321	0.1394839	30.21458	0.1933047	356.9989
cg13507893	SLC5A4	22	30989907	0.7788707	0.8117031	13.53177	0.820027	22.83552	0.8134581	19.6207
cg13573276	RHDH2	8	57395452	0.05590152	0.09301198	35.94159	0.09617066	41.21438	0.1189683	110.2862
cg13680777	PDHA1	X	19271661	0.3273658	0.37819	18.34501	0.3796937	19.16688	0.3796629	24.43568
cg13723482	HNRPH2	X	10054835	0.4700635	0.5249385	19.24442	0.5250147	19.29894	0.5439888	41.33884
cg13749822	HNF1A	4	14578813	0.2298911	0.3298919	64.38778	0.311005	38.98778	0.489419	356.9989
cg13759328	CDH13	16	81219022	0.09172505	0.11935	13.5729	0.1193564	13.22614	0.1479961	68.3676
cg13818573	C1QL1	17	4040088	0.04930582	0.07212645	13.72405	0.07908062	23.72527	0.130674	356.9989
cg13850625	FLJ11155	4	159351140	0.02590884	0.04796845	17.24427	0.0488293	18.34015	0.08732279	104.0187
cg13854874	CHAF1B	21	36679395	0.1199319	0.161349	26.31451	0.1591788	22.87082	0.1852488	75.51215
cg13870986	TBAO2	7	35259655	0.1062319	0.1538973	39.03662	0.1396621	17.9709	0.1873211	121.0498
cg13878010	ADAM12	10	12806923	0.07156545	0.1393748	100.8803	0.1228854	22.85913	0.184076	356.9989
cg13929328	FLJ46831	10	12942588	0.09590609	0.1690333	97.44207	0.1552819	64.69043	0.2346433	356.9989
cg13975369	TSGA14	7	129697789	0.2774859	0.367963	71.53513	0.3829968	97.54069	0.4235652	356.9989
cg13991029	PAGES	X	55263180	0.731548	0.7810711	28.1785	0.78737	36.58324	0.7784234	30.11581
cg14008883	SLC18A3	10	50489817	0.1441195	0.1812089	17.9999	0.1837608	22.27028	0.2662	

cg15774153	FGF19	11	69227954	0.03369973	0.07328153	52.26048	0.0697495	21.65953	0.06787174	103.7107
cg15812357	VGY	4	74774774	0.4115333	0.5323794	335.9589	0.5163629	83.76105	0.530492	330.9398
cg15842276	MTNR1B	11	92342296	0.3412051	0.4256836	56.1222	0.4001059	24.4173	0.4649271	135.4341
cg15898840	IGFBP3	7	45927359	0.02877674	0.06975324	59.00882	0.0599714	33.47224	0.117112	356.9969
cg15957394	AFAP	4	7992723	0.06837831	0.1079244	36.21637	0.1097328	38.57236	0.178747	356.9969
cg15988232	CSPG5	3	47596131	0.4335866	0.5131325	45.9643	0.4915372	21.78839	0.5362911	89.5513
cg16005224	SLC5A8	12	10017305	0.4557788	0.5083321	17.75202	0.5039306	14.10088	0.5022569	17.33382
cg16154416	RASGRF1	15	77169222	0.1477336	0.2064665	46.44087	0.1942193	27.60219	0.257989	356.9969
cg16204757	MBN	X	64803464	0.0498598	0.0498598	32.54855	0.4065058	33.6772	0.4189192	57.21453
cg16232126	SLC5A7	2	107969437	0.08662448	0.1448889	67.14854	0.1275146	32.14169	0.2020662	356.9969
cg16254309	CNTNAP2	7	145445085	0.06992172	0.1177977	52.62838	0.1127178	40.80559	0.1595777	356.9969
cg16263182	HBA2	16	1633399	0.0613284	0.0910058	21.18076	0.08652058	14.46173	0.1288219	118.6729
cg16362283	FAM46B	1	27211565	0.1694275	0.2332065	49.48766	0.2106471	18.93937	0.2687049	130.073
cg16368080	CCRK	9	89776965	0.2300702	0.2942426	39.42079	0.2809131	23.08831	0.3431803	137.0993
cg16428251	COX14	3	13998369	0.06904546	0.1183738	20.36776	0.1231582	26.30116	0.1674566	137.0993
cg16483916	PLAC2	19	5518758	0.1127935	0.1747767	63.4111	0.1675266	48.36425	0.2182314	356.9969
cg16539629	C14orf132	14	95575475	0.03882493	0.06616909	23.02646	0.07009233	29.67819	0.1195247	356.9969
cg16547529	FLJ33790	11	74818329	0.5516404	0.6667868	115.8496	0.6058288	20.0121	0.712817	356.9969
cg16632715	HOXD11	2	176680359	0.1127988	0.1730084	59.84668	0.1673671	48.11644	0.2262828	356.9969
cg16636540	ZNF135	19	63262280	0.1393397	0.2388162	345.9589	0.2097267	69.34833	0.3210882	356.9969
cg16652063	SLC15A5	7	65573719	0.0595419	0.09491597	31.30829	0.06550298	16.82593	0.1133525	80.81077
cg16652259	DLX1	2	172657747	0.05396351	0.08078027	18.4379	0.078488	14.81204	0.1088821	87.7657
cg16713808	CRNN	1	150654664	0.738628	0.7934793	37.34182	0.7940376	37.18185	0.78477	30.0386
cg16731240	ZNF577	19	57083062	0.1534855	0.2840474	345.9589	0.2532029	128.4647	0.3602605	356.9969
cg16749578	NR2F6	19	17218619	0.1093911	0.1517053	29.77497	0.1458562	21.11397	0.1738444	78.3372
cg16773899	EDL3	5	83716082	0.05364338	0.09080358	52.79683	0.09344615	41.20112	0.1571391	356.9969
cg16792800	GPC6	13	92877362	0.0709249	0.1089543	32.80515	0.1015798	20.35273	0.1649363	356.9969
cg16853392	ACTN2	1	234916012	0.2921671	0.3985465	79.32134	0.367019	45.39878	0.4510947	356.9969
cg16872560	PPP1R9A	7	94374922	0.03856385	0.06976552	30.47568	0.06462953	20.39497	0.1087682	356.9969
cg16954341	SCGN	6	25760360	0.1723322	0.2298988	39.37725	0.2115627	16.76478	0.2904806	356.9969
cg17051321	BNC1	15	81743512	0.08901338	0.132144	36.20604	0.1271667	27.19744	0.1597466	105.4747
cg17063929	NOX4	11	89864447	0.08621248	0.1207339	19.97196	0.1192029	17.64427	0.2031568	356.9969
cg17162024	UNG9433	8	53941007	0.05328921	0.08598929	28.48444	0.08352978	23.61001	0.1186012	113.7886
cg17214310	BARHL2	1	90955444	0.06803735	0.1164382	54.57645	0.1033104	27.86186	0.1710591	356.9969
cg17252960	IDA	6	19945329	0.0833739	0.1302395	44.92355	0.1227679	30.54471	0.2025448	356.9969
cg17279839	RARRES2	7	149696531	0.1479128	0.1839553	16.22059	0.2060327	44.25017	0.2401309	123.8677
cg17301902	GNA14	9	79453039	0.07564978	0.1079457	22.05272	0.102101	13.8894	0.1365319	88.55333
cg17398595	SH3GL2	9	17568725	0.1753643	0.2288028	33.12933	0.2192984	21.15136	0.2939643	356.9969
cg17410236	FLRT2	14	89066248	0.02610268	0.05910921	27.52581	0.05735542	34.79871	0.1039861	356.9969
cg17433778	CTSL	3	12335359	0.1794059	0.2455318	51.00735	0.2245634	21.98591	0.2921646	356.9969
cg17457560	NRG1	8	32525393	0.05381725	0.1168847	102.4547	0.1071936	74.53156	0.1688376	356.9969
cg17469479	CLEC9A	12	10074475	0.7317499	0.7839147	31.99341	0.7868487	13.48962	0.8166654	111.5354
cg17524886	CHFR	12	131934782	0.8900114	0.9203255	29.80188	0.9318005	64.40411	0.9416711	118.4928
cg17527798	LTF	3	46481408	0.06676365	0.10725	38.56841	0.09452147	16.9684	0.1456931	356.9969
cg17619823	ADRB3	8	37942652	0.02440387	0.05466026	34.73588	0.0530196	29.74105	0.1098552	356.9969
cg17641252	PLI14	14	6394149	0.6381969	0.6910536	40.15332	0.6911985	35.63033	0.7278923	356.9969
cg17655614	CDH11	16	67328445	0.3146394	0.4038585	64.93621	0.3715039	23.62148	0.5051605	356.9969
cg17685628	NKX2-8	14	36121444	0.08645626	0.1207248	22.71526	0.1279929	33.21061	0.1927116	356.9969
cg17688525	L3MBTL4	18	6404878	0.07040666	0.227825	345.9589	0.2237362	343.9177	0.3733433	356.9969
cg17710021	GOS2	1	207915200	0.04537325	0.08341502	42.19709	0.07014988	16.8329	0.1252441	356.9969
cg17729687	KIAA0980	20	25514382	0.06873226	0.1082359	36.03346	0.1109747	40.15788	0.1665182	356.9969
cg17731300	C10orf146	15	19129596	0.0513124	0.0523291	40.29155	0.05707819	27.42124	0.1231414	356.9969
cg17861230	PDE4C	19	18204901	0.1741725	0.3264658	345.9589	0.3071734	343.9177	0.4622221	356.9969
cg17977362	FLJ45964	2	240165186	0.783378	0.8828782	345.9589	0.8877767	343.9177	0.8237365	28.23983
cg17977409	SH3GL2	9	17569227	0.05097378	0.1312992	345.9589	0.125124	343.9177	0.2070601	356.9969
cg18005568	FLJ12056	2	71059399	0.1883881	0.2443283	34.44209	0.2536225	46.4849	0.3141074	356.9969
cg18023724	LOC62945	4	184307943	0.8284998	0.8980588	14.92718	0.8874448	28.62177	0.8902526	22.46576
cg18162399	DIG3	2	21959925	0.0619881	0.0917439	98.25542	0.1174399	88.22639	0.3119359	356.9969
cg18236477	ATP8A2	13	24341066	0.1089019	0.1855132	68.01582	0.1760242	75.48888	0.2864084	356.9969
cg18239753	KHDRBS2	6	63053922	0.08026583	0.1315759	55.19077	0.1147009	23.64015	0.1868215	356.9969
cg18267374	NEF3	8	24827178	0.02368456	0.04813472	22.17979	0.0444015	15.1711	0.1161557	356.9969
cg18267381	ZNF859	3	21767438	0.2119138	0.2989892	78.82233	0.2753665	39.89966	0.3211691	135.4341
cg18420965	EPHA5	4	66217740	0.06255709	0.1049819	44.1545	0.09987674	32.1513	0.1413838	356.9969
cg18438777	NPAS2	4	16454325	0.06178985	0.1021628	34.6395	0.110178	25.0202	0.1570896	356.9969
cg18454685	CACNA1G	17	45984238	0.02959117	0.05204444	17.11026	0.07095984	82.89059	0.1039661	356.9969
cg18511007	COL1A2	7	93861758	0.05766522	0.08803389	23.16782	0.09013446	25.95798	0.1108305	80.18781
cg18536148	IBX4	17	58888626	0.07223019	0.1210231	53.47853	0.1031498	20.29945	0.1435124	120.1278
cg18555440	MYO11	11	16907481	0.1061176	0.1743685	79.87895	0.1571760	43.77993	0.2097948	356.9969
cg18575221	C14orf162	14	67189283	0.6894953	0.7294262	13.9797	0.7308642	14.84031	0.73055	19.18946
cg18630040	PLAG2	6	4621492	0.0539234	0.05297011	45.19193	0.04374632	24.20259	0.09454737	356.9969
cg18676162	NME1	16	3686885	0.03478105	0.0565524	13.95694	0.05882175	13.42484	0.08790869	68.15943
cg18691434	GPC2	7	996133601	0.06925257	0.118233	55.23933	0.1294272	81.55394	0.2026	99.9929
cg18705301	NDUFAF1	15	39482722	0.5458303	0.5931242	14.71739	0.5949181	15.72374	0.6450871	90.79116
cg18717300	RHOJ	14	62741490	0.4642134	0.60325	345.9589	0.5963703	343.9177	0.6382324	356.9969
cg18809289	ALOX5	10	45189822	0.1470618	0.1933779	28.22877	0.1952241	33.0288	0.2584025	356.9969
cg18815943	FOXJ3	1	47654901	0.02621263	0.07373484	80.46931	0.08156295	105.4582	0.1796089	356.9969
cg18828296	PCDHAC1	5	14828283	0.94846738	0.9824763	45.58182	0.9416848	28.62268	0.7683821	356.9969
cg19014419	ZNF300	5	150264697	0.1785119	0.2377017	40.55902	0.2145618	13.36375	0.2745852	118.2321
cg19064258	HS3ST2	16	22733618	0.100765	0.151178	45.55486	0.1517381	45.43853	0.2416038	356.9969
cg19064675	ASAM	11	122571739	0.06482343	0.09361577	19.13737	0.1011637	30.57314	0.130584	110.361
cg19162158	NRG1	8	32524969	0.0185836	0.04235419	22.50198	0.04228819	21.84576	0.1167776	356.9969
cg19211800	MARCKS	6	114285706	0.03319719	0.0560686	35.37486	0.05897644	21.3286	0.1007562	356.9969
cg19229259	PFPR1A	3	94375283	0.05182514	0.04351574	34.58618	0.04168484	28.06912	0.3852297	356.9969
cg19283196	SLC10A4	4	48179990	0.1033425	0.1372075	19.12618	0.1322201	13.22814	0.1762425	40.33115
cg19352038	PAX3	2	222873113	0.1287681	0.1977949	71.25552	0.1740043	29.21289	0.2632359	356.9969
cg19461621	COLEC12	18	490979	0.0449097	0.07167938	20.25038	0.07472708	24.84343	0.1047159	110.2816
cg19502744	SRD5A2	2	31659419	0.1377448	0.1986899	52.97828	0.1927478	4		

cg21237418	RAB34	17	24069170	0.184196	0.2595798	65.15487	0.2326114	24.98102	0.2838749	124.0274
cg2123818	GAL3	11	6557321	0.074616	0.133333	84.97689	0.1131349	38.03413	0.1918929	356.9969
cg21269934	FLJ34748	4	2030017	0.0378377	0.06087818	16.10765	0.07079469	33.44721	0.1052016	356.9969
cg21296230	GREM1	15	30797828	0.07405682	0.1529872	129.6118	0.1417784	97.61829	0.236622	356.9969
cg21303011	THR8	3	24512181	0.02069264	0.05316691	41.49623	0.05043947	33.86026	0.1176509	356.9969
cg21303386	RGS7	1	239506834	0.0776526	0.1692346	345.9589	0.1758729	343.9177	0.2853247	356.9969
cg21363706	NAT1	8	18110765	0.8467598	0.8812652	25.63313	0.8855257	30.20182	0.8810232	30.89814
cg21376883	ACTN2	1	23491855	0.1532003	0.2080259	39.0036	0.2188108	55.52134	0.3284453	356.9969
cg21419391	ISL1	5	50714208	0.08510042	0.1284147	37.70311	0.13301769	45.30483	0.1866084	356.9969
cg21416022	TTCC23	15	97607184	0.09941596	0.1419882	32.46465	0.1636848	73.94561	0.1517658	56.72669
cg21458907	CADPS3	3	62835842	0.03480712	0.06187805	23.71162	0.06218524	23.65803	0.0949764	122.8476
cg21494776	ICAM4	19	10258780	0.1184758	0.2023194	110.172	0.1832564	66.22165	0.2559797	356.9969
cg21504918	GPX3	5	150380194	0.07734953	0.1100431	22.26206	0.1070046	17.68744	0.1436047	101.7426
cg21530890	SOX8	16	97221	0.03545154	0.0786781	60.54193	0.06619155	29.8739	0.1583306	356.9969
cg21535396	FAM38B	21	11818075	0.03089519	0.05961316	28.66731	0.06159305	32.05698	0.1028266	356.9969
cg21589115	DKKL1	19	54558926	0.09679645	0.1504859	53.26154	0.1342691	24.59435	0.175003	120.0639
cg215891742	HOXD10	2	176689244	0.1259341	0.1648042	22.05732	0.1611794	17.4704	0.2060453	106.4068
cg21604042	SCUBE3	6	35289379	0.0997154	0.16299	71.89789	0.1418515	30.80175	0.1832746	132.5897
cg21643045	CCL20	2	228389937	0.8786342	0.9025771	17.32191	0.9047347	20.64828	0.9187099	64.02834
cg21755709	C21orf124	21	43973826	0.6321381	0.6939328	32.99706	0.6778232	51.17173	0.6711658	14.99534
cg21787291	TGFB1	6	12416869	0.0129442	0.0344928	19.84558	0.0358485	22.22721	0.0485734	62.97253
cg21801378	BRUNOL6	15	70399179	0.03380692	0.09111544	104.332	0.08408723	81.50842	0.1877008	356.9969
cg21870668	SNRPN	15	22674824	0.2832625	0.3438029	29.8134	0.3828972	85.85447	0.4191238	356.9969
cg21870884	GPR25	1	199109052	0.2790672	0.3993272	129.6118	0.3934104	117.7622	0.4937053	356.9969
cg21992250	SLC15A3	11	60475285	0.1288625	0.1926788	61.01486	0.1895244	54.15601	0.2537051	356.9969
cg22020380	RAB32	6	146909626	0.08380377	0.1173698	22.21824	0.1201984	25.71902	0.1630853	133.3159
cg22034129	SGD142	18	41448480	0.7429246	0.7987942	40.20344	0.785874	28.7503	0.7831969	23.01269
cg22131691	PDE1C	7	32077513	0.04013339	0.062629	14.83502	0.0631726	15.26295	0.09471236	98.58573
cg22165175	KCNA2	1	110950438	0.1462682	0.1889342	23.75236	0.1879526	21.66305	0.23454	115.2287
cg22189519	CDC37L1	9	4658226	0.7689782	0.8101371	22.05732	0.8113733	25.49688	0.7998919	14.58581
cg22380033	GRB14	2	165186164	0.02886731	0.05465528	23.14495	0.05198592	17.96319	0.09312766	356.9969
cg22407458	TOP11	6	35217059	0.0314136	0.07409967	61.92524	0.05931046	25.65975	0.113134	356.9969
cg22418909	SFRP1	8	41285895	0.09277031	0.1529727	65.45002	0.150859	62.69603	0.0839976	356.9969
cg22485810	CEN2A2	17	26272851	0.08085564	0.1194887	30.75604	0.10753	13.45493	0.1372525	74.11271
cg22524514	CSF1	11	65536252	0.202532	0.2429368	15.79858	0.2584737	31.49669	0.3070555	127.6077
cg22578204	TIMP3	22	31527952	0.05073187	0.0980799	61.409	0.07742833	18.53802	0.1279842	356.9969
cg22598028	ZNF660	3	44601496	0.04274432	0.07534182	32.41668	0.07175168	24.77024	0.1152326	356.9969
cg22605578	LHX1	17	32368142	0.06427442	0.1173569	67.22607	0.1099047	46.8976	0.1671476	356.9969
cg22709192	HOXD11	12	58265376	0.1036959	0.1658493	46.74808	0.1328845	18.53853	0.1815483	114.4444
cg22719523	OPRM1	6	154402425	0.3589042	0.4153286	22.13273	0.4185029	22.64054	0.4771343	122.13
cg22736354	NHLRC1	6	18230698	0.1134345	0.2373797	345.9589	0.2551775	343.9177	0.3489992	356.9969
cg22752533	SLC12A5	20	44091355	0.3123038	0.3657894	21.18076	0.3656523	20.6246	0.4819823	356.9969
cg22754447	IMPACT	18	20260314	0.07303438	0.1124002	34.34933	0.1014254	16.76478	0.1414424	111.1706
cg22799132	TRPC5	X	111212151	0.1877443	0.2263463	15.24077	0.2306655	26.7503	0.2674977	80.4641
cg22816110	FOXD3	1	63561261	0.04850669	0.08905841	54.22646	0.09386538	65.81715	0.151741	356.9969
cg22833229	EFCA9	9	49811409	0.0529277	0.0911051	22.21479	0.10521	30.80217	0.1170073	121.9989
cg23037403	ZNF454	5	178300789	0.103441	0.1607412	57.76059	0.1419186	24.71171	0.2058608	356.9969
cg23089840	LRRCC3	21	44699314	0.1350539	0.188493	40.97071	0.1843338	33.66385	0.2932739	356.9969
cg23095584	GBX2	2	236742443	0.1437448	0.1884774	26.665	0.1805686	17.09874	0.2313557	114.9747
cg23130254	HOXD12	2	176672834	0.06770161	0.1085743	38.99382	0.1008031	24.44071	0.1729039	356.9969
cg23154064	C6orf63	3	56674186	0.7142479	0.7676315	31.14447	0.7689883	32.19146	0.7629988	30.44825
cg23198531	COL11A3	9	12182015	0.0521051	0.09112051	29.55942	0.09143269	19.45229	0.1201897	15.69036
cg23207990	SFRP2	4	154929885	0.05228292	0.07935898	19.15416	0.07687505	15.1782	0.1065211	87.07372
cg23211240	BTG4	11	110888834	0.06807178	0.1370189	107.0111	0.1252913	74.92707	0.1972143	356.9969
cg23290344	NEF3	8	24827371	0.0402549	0.09183963	80.32346	0.08695621	66.03104	0.2019625	356.9969
cg23303408	POU4F3	5	145698970	0.07980057	0.1116026	20.49438	0.1068552	14.03509	0.1510091	113.7042
cg23316390	EDMR8	13	77399917	0.09668125	0.08800273	21.31494	0.09101699	25.56385	0.1392103	356.9969
cg23349790	IC52A1	9	15311642	0.0415842	0.0730929	35.9589	0.0430559	34.46229	0.2631406	356.9969
cg23517605	TUBB2B	6	3173364	0.1467496	0.1833663	23.66128	0.183889	17.1079	0.2500322	356.9969
cg23540745	HIST1H4G	6	26355112	0.8056611	0.8426143	21.5972	0.8466293	27.0438	0.8482467	36.41195
cg23606079	CRISPLD2	16	83411372	0.0536623	0.5507284	13.9797	0.5628671	23.34311	0.5448018	13.9404
cg23694248	PTFRR	12	69600582	0.08282806	0.1102028	14.3691	0.1171827	22.9737	0.1619898	134.2318
cg23695504	FLJ45717	1	245341967	0.0664441	0.1955499	345.9589	0.1498442	343.9177	0.2891064	356.9969
cg23710218	M5C	9	7291960	0.1471636	0.1717036	31.1328	0.1447176	17.25437	0.2111973	101.2643
cg23748737	SCARF2	22	19121313	0.04255878	0.07168049	25.00612	0.07228766	25.44662	0.109767	137.0983
cg23771603	MYO3A	10	26263316	0.03946321	0.0946302	91.74947	0.08983277	76.96599	0.1638484	356.9969
cg23833452	HAB32	6	146906445	0.0824808	0.1496182	105.4871	0.1399412	19.98914	0.2310399	356.9969
cg23850212	ZFP28	19	61741669	0.02913207	0.05106704	16.25743	0.05076467	15.42353	0.08323005	108.4502
cg23859899	AGP5	12	48942088	0.1790602	0.2376708	38.30111	0.2320835	29.99142	0.303046	356.9969
cg23950724	SYT4	12	33429246	0.033045	0.0737226	31.19395	0.03137209	18.35001	0.4643311	356.9969
cg23967169	FAM19A3	3	69064193	0.04301019	0.07401209	28.47422	0.07750805	34.58676	0.09342165	83.36467
cg23984434	GUCY1A2	11	10633866	0.03929599	0.0792671	49.9235	0.06919469	29.02004	0.1314157	356.9969
cg24056567	PSD3	8	18918189	0.1547709	0.2127483	38.93169	0.1955602	16.97939	0.230216	86.21098
cg24076884	PCDHAC2	5	140327105	0.1508885	0.200966	32.69004	0.1899545	18.63852	0.2738218	356.9969
cg24101359	GNMT	6	43036473	0.04439934	0.07837129	33.9719	0.07632466	29.05766	0.1385122	356.9969
cg24110578	CDH22	20	44313670	0.1724539	0.2359311	46.3063	0.2123634	17.41752	0.2569575	94.4077
cg24120841	THR8	3	24512181	0.02069264	0.05316691	41.49623	0.05043947	33.86026	0.1176509	356.9969
cg24127874	HES6	2	238814598	0.1458754	0.2794232	34.9589	0.219719	73.95322	0.3061356	356.9969
cg24133115	PDE10A	6	165995510	0.06949112	0.1177437	53.57451	0.1181233	43.47062	0.1917116	356.9969
cg24169822	H0XA4	7	27137519	0.4422526	0.5674872	125.3522	0.5140418	54.3874	0.5572102	113.3429
cg24176563	EYA4	6	133604469	0.04623841	0.08727411	48.7057	0.07710634	26.48927	0.1270488	356.9969
cg24198634	POU4F2	4	147773976	0.0664429	0.1037395	31.80733	0.1024444	28.78658	0.1639355	356.9969
cg24215443	PTGFR3	13	13289232	0.03458493	0.0530927	36.81711	0.02948905	36.92153	0.1168904	356.9969
cg242396745	H0CN4	15	71447667	0.08698802	0.1581509	98.3911	0.1488456	74.93433	0.2251868	356.9969
cg24245953	CACNG1	17	62471071	0.8706093	0.8950135	13.94451	0.8955734	14.34851	0.892449	14.10844
cg24641352	ZFP41	8	144399453	0.2846392	0.3540409	40.16066	0.3304498	15.52643	0.3711072	72.18038
cg24649521	PENK	8	57921482	0.03829215	0.06054322	14.90047	0.06123162	15		

cg26207503	MYF5	12	79634880	0.2466427	0.3072106	32.99706	0.3091205	34.34102	0.3730525	356.9969
cg26238727	UGT1A10	2	234209849	0.8450799	0.8748308	17.56435	0.8753819	18.01044	0.8706254	15.87949
cg26252167	GPR6	6	110407266	0.07551654	0.1209686	45.11324	0.1074825	21.09825	0.2242041	356.9969
cg26320696	PARVA	11	12355685	0.07570803	0.1222014	47.08142	0.1179337	37.65408	0.1714693	356.9969
cg26323655	FSBP	8	98517861	0.7441741	0.7792487	13.05343	0.7887009	22.6617	0.7949365	37.87258
cg26372517	TFAP2E	1	35811746	0.2795726	0.3831897	94.38761	0.3349526	24.10397	0.4301105	356.9969
cg26453588	BIK	22	41835965	0.4192379	0.506779	56.86924	0.4721362	17.80433	0.5010629	56.07082
cg20504021	IRX2	5	2305882	0.1217711	0.152092	13.15706	0.1608843	22.43451	0.1918628	85.13159
cg26599306	GSCL	22	17517371	0.02860504	0.04972031	13.41397	0.0534093	18.92521	0.1035891	356.9969
cg26609631	GSH1	13	27264814	0.06153295	0.1285883	107.2046	0.125272	96.55791	0.2255699	356.9969
cg26619317	CNN3	1	95164977	0.06180143	0.113571	65.628	0.1115232	60.071	0.1830835	356.9969
cg26620157	PAX9	14	36200048	0.07478639	0.1028045	16.28993	0.1083873	23.60226	0.1304999	75.94226
cg26644504	KCNE1L	X	108756300	0.5882326	0.6528222	32.97848	0.6389316	18.19889	0.6315963	16.73915
cg26687173	LOC126248	19	38314931	0.8315594	0.8701516	29.44755	0.8747483	37.65872	0.8999671	126.8465
cg26711820	MYF6	12	79625820	0.1515648	0.2022582	33.43023	0.2040854	35.03302	0.2360162	103.7055
cg26796190	PYY	17	39438721	0.0296458	0.05264317	17.90134	0.04886918	13.21132	0.08525409	113.1692
cg26822175	CRYBA4	22	25348010	0.7878091	0.8413517	46.84223	0.8598429	93.86996	0.8538103	85.8487
cg26845300	SNX9	6	158163821	0.05885643	0.1278256	115.6954	0.1055788	54.36108	0.1724292	356.9969
cg26896762	ISL1	5	50715118	0.06846588	0.09950198	21.69634	0.09614222	16.60315	0.1280201	89.92125
cg26929536	SCG3	15	49760752	0.195499	0.2339101	14.567	0.2404622	20.28107	0.287406	102.4867
cg26985289	CLSTN1	1	9807209	0.04294315	0.0708963	22.93982	0.06594145	14.66539	0.1010152	107.0004
cg27009703	HXA9	7	27171419	0.04640554	0.09883118	77.82594	0.1036691	91.00295	0.1468317	356.9969
cg27096144	MSX2	5	174084385	0.09552565	0.163222	84.35762	0.1496693	53.70201	0.2288038	356.9969
cg27120999	HSPA2	14	64077803	0.3207451	0.4552866	345.9589	0.4053047	56.4542	0.4738687	356.9969
cg27169020	BNC1	15	81745233	0.2505465	0.3061539	26.98192	0.3007584	21.06313	0.340213	83.42342
cg27223047	FBN2	5	127902724	0.1322661	0.2077543	83.27486	0.1936856	54.37157	0.2583926	356.9969
cg27320127	KCNK12	2	47651900	0.057845	0.125803	113.313	0.1289808	122.13	0.1694694	356.9969
cg27389185	ZNF540	19	42733963	0.215742	0.2711099	30.1327	0.2669549	24.74426	0.3214588	125.4305
cg27403635	KCNN2	5	113726190	0.04807666	0.08370673	35.93866	0.07860775	25.31854	0.1265155	356.9969
cg27409364	KCNC1	11	11714319	0.3467687	0.4155696	35.2663	0.4000752	19.34814	0.5327069	356.9969
cg27425675	DEXI	16	10943234	0.3128334	0.3648265	19.83812	0.3688767	22.93908	0.4269695	119.3908
cg27476329	GOLGA2L1	12	99091086	0.7543266	0.7898156	14.13505	0.7909796	14.91746	0.7885153	16.84768
cg27491887	KCNQ1	11	2511159	0.03401833	0.06231215	26.23255	0.06036723	22.05113	0.06433444	36.21555
cg27501458	SULT4A1	22	42590023	0.0621512	0.09230316	21.74767	0.08725531	14.22715	0.1250544	104.2006
cg27553585	KCNG3	2	42573830	0.2649389	0.342862	53.96785	0.3318831	37.84329	0.3869828	356.9969
cg27603796	CTTNBP2	7	117300039	0.07887629	0.1171266	30.69244	0.1094006	18.53285	0.1482902	109.378
cg27634151	GPR83	11	93774294	0.06425825	0.1104799	51.63652	0.0996429	29.64739	0.1465686	356.9969

Table S2. List of 330 CpG loci concurrently and significantly hypomethylated in centenarians, centenarians'offspring and offspring of non long-lived parents vs young controls. Columns indicate: Illumina Probe ID (ILMNID), NCBI gene symbol of associated gene (SYMBOL), chromosome localisation (CHR) and map informations (MAPINFO). For each probe we reported AVG beta in each group, and DiffScore, that indicates its level of significance vs young controls.

ILMNID	SYMBOL	CHR	MAPINFO	YOUNG CONTROLS.AV G_Beta	CENTENARIANS' OFFSPRING.AVG_Beta	CENTENARIANS' OFFSPRING.DiffScore	OFFSPRING OF NON LONG-LIVED PARENTS.AVG_Beta	OFFSPRING OF NON LONG-LIVED PARENTS.DiffScore	CENTENARIANS.AV G_Beta	CENTENARIANS.Diff Score
cg00136405	IL21	4	123761648	0.4728598	0.4240257	-15.01396	0.4183451	-19.0383	0.3890795	-59.56889
cg00141845P11-311PB.1	AGA	X	74410077	0.3089329	0.259428	-20.28484	0.2657028	-14.27439	0.2446625	-44.11953
cg00174500	CMTM5	14	22816319	0.8565797	0.7906154	-71.49622	0.7900305	-72.44791	0.7467912	-217.2934
cg00186954	ST5	11	8890556	0.7541256	0.6880664	-46.39658	0.6993327	-30.30163	0.6803185	-66.0472
cg00209951	DENNM2C	1	115014357	0.0628654	0.05789062	-14.99949	0.05879908	-13.10313	0.06017039	-15.30125
cg02229397	TJP1	6	43553200	0.4115071	0.3619993	-16.33092	0.3603413	-17.16198	0.334918	-52.21939
cg00308665	HTR2A	13	46387655	0.5142115	0.4676489	-13.41184	0.417334	-70.61234	0.3450799	-246.952
cg00343092	DZRP	22	41077910	0.04629302	0.02493012	-16.26532	0.0237245	-10.3027	0.026430	-17.0730
cg00353953	ZNF384	12	6669802	0.3112201	0.2689171	-13.80173	0.2462953	-37.33108	0.2428157	-50.13409
cg00392257	ISG20L2	1	154963371	0.7540206	0.6855279	-50.13595	0.6938614	-37.05069	0.6340421	-166.7619
cg00397945	APOC1	19	50139366	0.4945059	0.4454289	-15.14232	0.4312081	-26.70804	0.4368835	-27.21166
cg00398048	AGA	4	178631336	0.2772985	0.2141752	-40.21252	0.227798	-21.97688	0.1770803	-123.4769
cg00431114	C20orf1121	20	42537441	0.2781705	0.2338427	-17.39514	0.2339977	-16.73714	0.2054061	-83.43237
cg00451635	EMP2	16	10582310	0.6673892	0.5825795	-61.14648	0.5689	-83.12023	0.509988	-236.7415
cg00563932	PTGDS	9	138990870	0.5684094	0.4833137	-54.19538	0.468496	-76.21863	0.4307101	-165.3017
cg00582628	RGS20	8	54927068	0.4004345	0.3428123	-23.7711	0.3349794	-31.17859	0.286813	-123.0717
cg00609280	WFDC10B	20	43786147	0.7427672	0.6853172	-32.99708	0.7015578	-15.45263	0.6521314	-94.40548
cg00618625	NRS1A	9	12630929	0.091444	0.0773437	-14.5819	0.073090	-19.32362	0.0605977	-50.28995
cg00705700	LIPK2	11	118332292	0.7417098	0.6823411	-35.28769	0.6873456	-28.36979	0.6450125	-106.4634
cg00895324	PCP4	21	40160387	0.6874025	0.6445047	-14.2848	0.627979	-28.97118	0.5998274	-76.51313
cg00995152	DAB2IP	9	123536136	0.7987885	0.7569591	-21.39237	0.7469597	-33.10307	0.7310379	-66.9968
cg01040850	MR1	1	179269292	0.7161569	0.6445815	-48.3063	0.6599364	-27.90646	0.6307232	-78.0948
cg01432087	FLJ21740	11	66939838	0.7842926	0.74704	-16.27193	0.7366727	-26.60543	0.729096	-60.48463
cg01459453	GELP	1	16785536	0.7347738	0.6580462	-57.70612	0.619498	-134.2655	0.5805461	-257.5824
cg01511567	SSRP1	11	68860207	0.4482679	0.3188014	-13.07971	0.1111792	-21.08825	0.101572	-45.57811
cg01612158	FCRL4	1	155834344	0.4994417	0.4471704	-17.54136	0.4506918	-14.50699	0.4396414	-29.33844
cg01618660	TRIM14	9	99922197	0.666982	0.6119994	-23.74788	0.6057965	-29.33295	0.581263	-58.13617
cg01671881	C20orf71	20	31268662	0.826497	0.7900511	-17.50504	0.7860038	-21.67056	0.7386813	-30.58845
cg01745657	PLCXD2	3	112875859	0.1641217	0.1055817	-59.34784	0.1125031	-42.83401	0.1072036	-63.06136
cg01753375	DCTN1	2	74461108	0.6053709	0.5492793	-22.12191	0.5298913	-41.87669	0.46217	-133.6042
cg01805598	PSMD6	6	8930076	0.8201237	0.5595645	-26.86985	0.584252	-31.60928	0.511029	-103.994
cg01820374	LAC3	12	6752344	0.427747	0.2924534	-62.4967	0.2944688	-155.3162	0.1952613	-354.0796
cg01916401	RUNX2	6	45401079	0.4028823	0.3479501	-21.16888	0.3353712	-33.38776	0.3060523	-81.32763
cg01970325	NELF	9	138474062	0.6345366	0.5705072	-31.21771	0.5664235	-34.83274	0.5216393	-119.0325
cg02163528	OBFC2B	12	54904915	0.1093846	0.0798253	-18.5991	0.0750533	-23.51752	0.0672909	-48.1334
cg02228185	ASPA	17	3326317	0.6500667	0.4919592	-22.7688	0.4995214	-197.8839	0.3524646	-354.0796
cg02278695	CTNNA1	5	138116341	0.419444	0.3366563	-24.4659	0.397251	-41.5475	0.320494	-69.5294
cg02334775	ISG20	15	86983680	0.629435	0.5603613	-60.3832	0.576674	-62.06961	0.4640533	-354.0796
cg02337447	SCO1	17	10542577	0.3289934	0.2853521	-14.19026	0.2664082	-32.63079	0.2675916	-62.01289
cg02401978	FLJ131413	7	148826398	0.5059580	0.4419265	-27.97393	0.4389572	-30.26247	0.452671	-22.99132
cg02523617	HIP2	4	39375775	0.2281299	0.1871115	-17.55017	0.1844754	-19.95094	0.192823	-16.00913
cg02657721	SEMA3B	3	90280395	0.3302877	0.2317807	-95.32116	0.2350333	-67.67953	0.1705103	-316.1873
cg02828104	Kat5	20	47894767	0.4699494	0.3689563	-49.94767	0.3438529	-63.89244	0.3423153	-160.2917
cg02833725	ISG20L2	12	154963392	0.7557245	0.6924195	-42.63474	0.7019196	-29.31538	0.6439926	-146.2264
cg02838877	MBNL2	13	96671878	0.4370856	0.36884	-33.75081	0.3423034	-70.88327	0.3250716	-113.3494
cg03224418	SAMD10	20	62082302	0.3967906	0.3256412	-39.17096	0.3181791	-48.14034	0.2479669	-226.4845
cg03343942	SLC39A5	12	54911376	0.8998482	0.8654173	-13.37648	0.8649001	-13.66342	0.8390663	-69.16692
cg03375002	LAT2	7	73281812	0.3988772	0.3452432	-20.11715	0.3507443	-15.19637	0.3042447	-83.02184
cg03440846	ACSS2	20	32828210	0.3134066	0.1537311	-61.93749	0.1741824	-70.1386	0.1320289	-160.2917
cg03465320	TAP1	6	32931056	0.3501791	0.3008526	-18.06906	0.2849782	-34.0296	0.2311209	-151.335
cg03643709	VPS18	15	38974076	0.1547507	0.1192298	-18.9641	0.1113545	-30.09323	0.1164905	-27.96815
cg03764585	FMOD	1	201586846	0.3242713	0.2571637	-40.01235	0.2371153	-72.81727	0.2170526	-128.348
cg03908676	XIKD1	11	10546858	0.5336052	0.479244	-19.30504	0.4717462	-25.31854	0.428007	-94.80461
cg03929796	ALAS1	3	92260860	0.1363276	0.1072523	-13.36505	0.1003581	-21.92669	0.07740319	-82.35855
cg03972838	FLJ2012	2	39282626	0.7557771	0.7178954	-17.89528	0.68692978	-36.85948	0.7045996	-154.2246
cg03991512	LHDH	16	37370957	0.5442821	0.4508488	-65.89568	0.4727711	-35.45419	0.467207	-97.01416
cg03996822	RASSF6	4	74705422	0.4451779	0.3501299	-70.86332	0.311999	-151.3232	0.3074597	-175.7562
cg04019407	GIP	17	44401303	0.7987641	0.7645673	-13.71771	0.7584389	-19.28637	0.7409508	-49.51334
cg04038898	POMGNT1	1	46437185	0.4756859	0.3799561	-70.12952	0.3663231	-33.60806	0.3240013	-210.587
cg04037228	LUMD1	3	45611390	0.5717196	0.4891979	-50.87369	0.4967623	-39.92717	0.4203252	-202.4903
cg04123409	SDS	10	11232600	0.2989885	0.2279704	-56.14487	0.2522935	-62.39569	0.1932402	-154.2246
cg04151683	LRRN4C	12	8930076	0.5982925	0.5329425	-33.59498	0.5271332	-43.87749	0.5212968	-52.32867
cg04155793	CDK10	16	88280348	0.6681854	0.571796	-70.19353	0.6156206	-16.31211	0.5361429	-151.1565
cg04341806	LCP1	13	45655396	0.7068565	0.651307	-27.03194	0.6382437	-41.71909	0.6014828	-114.6235
cg04424621	HIST1H2BJ	6	27209920	0.1148823	0.08632717	-15.25409	0.07494801	-33.80716	0.07151626	-49.12426
cg04431054	LOC133619	5	126680923	0.1360268	0.1467068	-32.42454	0.1506758	-25.71902	0.1630996	-15.84892
cg04474832	ABHD11A	3	51983527	0.2674673	0.2218516	-19.16781	0.2183254	-22.39559	0.1861686	-63.5486
cg04559909	CYCL1	4	83371907	0.6178844	0.5181922	-48.93171	0.5174435	-46.4329	0.5397118	-121.0379
cg04561804	TLOC1	3	171166670	0.5174598	0.4639282	-18.55813	0.4289876	-57.27983	0.4365817	-54.65139
cg04662594	EPB49	8	21972961	0.3392861	0.2761059	-33.37927	0.258663	-57.97816	0.2124487	-108.1222
cg04721098	CACNG3	16	24173204	0.7802885	0.744357	-13.61387	0.7376753	-19.46045	0.7451863	-16.81191
cg04747619	DEFA5	8	6902248	0.634699	0.5724158	-29.34477	0.5684101	-32.86113	0.5068256	-148.3359
cg05026186	ABLIM3	5	14891069	0.2961071	0.2062335	-24.84634	0.2117069	-18.40014	0.2186329	-16.33735
cg05154798	HNR1P4	5	83371907	0.6178844	0.5181922	-48.93171	0.5174435	-46.4329	0.5397118	-121.0379
cg05190718	CASQ2	1	116112235	0.8272871	0.7921115	-17.39847	0.781781	-18.06958	0.7566801	-83.36578
cg05228406	CLCN6	1	11787939	0.423724	0.3657593	-23.40219	0.3495235	-40.41292	0.3394646	-62.95072
cg05379350	GIT1	17	24941283	0.1846594	0.1149999	-78.60734	0.1120783	-86.00595	0.09999474	-135.4341
cg0524065	PHKG1	7	56128022	0.8015087	0.7418274	-46.53547	0.7359981	-65.33271	0.6639099	-254.0501
cg05825232	ELN	7	73080467	0.2940024	0.2109591	-71.62494	0.1816081	-145.3222	0.2081355	-86.41518
cg05925416	CYP22B1B	10	55117454	0.5527972	0.4951973	-41.85277	0.4951973	-41.85277	0.4784578	-47.84578
cg05989524	ILMNA	1	154349900	0.4491323	0.3920467	-22.02072	0.3693483	-46.51368	0.3348672	-116.8012
cg05949660	MICAL1	6	109884335	0.7498299	0.7120994	-13.38154	0.6939127	-31.09214	0.6550418	-105.0448
cg06069187	SARM1	17	23722410	0.09023373	0.06004964	-22.26206	0.06226399	-18.08973	0.05853045	-30.58904
cg06131859	KYNU	2	143351601	0.3361864	0.2885552	-17.18392	0.2666734	-40.91074	0.2322761	-116.1679
cg06139319	OSBPL5	11	31435847	0.5058795	0.4528145	-18.25975	0.445961	-23.58294	0.4120133	-74.88845
cg06143901	TCF15	20								

cg09971811	CST7	20	24878099	0.2448943	0.2054215	-14.80453	0.1833199	-41.92645	0.1340764	-185.2314
cg09980522	GR1A4	11	104987012	0.2444959	0.198819	-11.13637	0.2051962	-14.30069	0.1954747	-30.50603
cg09983855	TRIM21	11	4371762	0.2741386	0.2080409	-44.39968	0.2054969	-48.49593	0.1885075	-91.84476
cg10037088	WASPO1	2	7340518	0.1867025	0.2744051	-72.29035	0.1744102	-74.55373	0.1544732	-89.08472
cg10052840	SEMA6B	19	4509119	0.1816705	0.2744652	-72.29829	0.2454655	-48.30365	0.2764875	-129.94
cg10084933	SLC9A3R2	16	2017648	0.4707176	0.4107655	-24.3306	0.4051559	-29.18659	0.3787236	-72.54522
cg10106284	FAM49A	2	16711469	0.5273116	0.4400361	-56.37743	0.4505277	-35.97298	0.3911656	-161.2267
cg10203483	LOC284948	2	8549970	0.6505823	0.5907363	-27.9478	0.6034036	-16.05316	0.5506179	-93.33501
cg10423880	CST5	20	23808761	0.6364214	0.5915031	-14.02885	0.5804163	-22.63532	0.538395	-94.73
cg10528999	BKBR1	14	95732059	0.6088112	0.5580061	-14.96377	0.5601709	-44.30462	0.5119495	-77.89922
cg10622172	CFRFB5	7	28305282	0.6502028	0.5019888	-16.0955	0.4668009	-52.98213	0.443323	-100.8561
cg10682846	GNMT	6	43035964	0.6087763	0.5463231	-28.33564	0.5531155	-21.37062	0.569647	-11.00218
cg10917602	HSD3B7	16	30904131	0.5934159	0.5188875	-41.2368	0.5121123	-48.9178	0.4344174	-226.2216
cg10986043	TCAP	17	35074021	0.6615129	0.6128805	-17.75828	0.6001614	-29.17365	0.5885224	-50.60661
cg10994379	CAPSL	5	35975177	0.600166	0.5519972	-15.45633	0.5444406	-21.1669	0.5581183	-14.9674
cg11147896	NFAF5	16	68155597	0.1804149	0.4435965	-17.13391	0.41419214	-19.03999	0.1475522	-17.7404
cg11251498	INDOL1	8	39911926	0.4741017	0.4162942	-22.30374	0.421258	-42.1258	0.3640792	-105.3159
cg12199964	MAPKAP1	9	127509604	0.2275406	0.1561955	-65.90917	0.1525594	-73.84767	0.1342485	-134.5226
cg11314684	AKT3	1	242072911	0.2914758	0.2322583	-32.86468	0.2455585	-17.55661	0.2242064	-51.23547
cg11393848	C1QC	1	22841927	0.4914265	0.4268404	-28.6514	0.4196817	-35.49034	0.359517	-77.60791
cg11466837	TRIM29	11	119514892	0.7842762	0.7418118	-20.44864	0.7483956	-13.7007	0.7093998	-76.13888
cg11521325	FLJ32926	19	53503090	0.5445978	0.5970914	-24.75805	0.5973857	-23.89336	0.5203399	-123.4817
cg11726593	IMP1A	8	82761356	0.2209847	0.1842075	-13.94681	0.1825255	-15.16495	0.1664337	-42.40506
cg1919694	TBC1D10B	16	30288101	0.1342846	0.10492	-13.90876	0.100774	-18.79477	0.09667839	-51.95156
cg12261786	C10orf116	10	88718710	0.7148511	0.638229	-55.4795	0.6305337	-67.06512	0.5799208	-189.9313
cg12334759	C19orf19	19	426154	0.7926051	0.752422	-18.92962	0.7448838	-26.85255	0.7138738	-86.54233
cg12434587	MGMT	10	131155199	0.05615582	0.02377647	-39.66273	0.02874726	-25.62413	0.02858192	-32.34854
cg12437481	MRF128	16	380113	0.702499	0.5965321	-179.947	0.5609281	-191.7145	0.6182558	-71.05267
cg12554573	PARP3	3	51951707	0.7154828	0.6383679	-54.81308	0.6523737	-35.74471	0.5385828	-330.6467
cg12650780	SH3BGR1	X	80344705	0.3796563	0.3313735	-16.17483	0.3161152	-30.17373	0.2829265	-90.3225
cg12819826	PPAN	19	10077676	0.3947683	0.3380415	-23.14773	0.3182067	-45.39314	0.2661569	-163.2981
cg12941369	PDCD6IP	3	33814393	0.3110498	0.2658783	-16.17623	0.2531357	-28.56619	0.2281584	-76.01257
cg12981137	MGMT	10	131155585	0.06185778	0.01805769	-76.40689	0.03410822	-30.80175	0.0230097	-64.84192
cg13129045	C10orf35	10	71052702	0.1519733	0.1051102	-37.84594	0.1063714	-34.42756	0.1033055	-45.57599
cg13180098	RHO	3	130729513	0.8163340	0.7692453	-13.94451	0.7822085	-14.78107	0.7323268	-108.8148
cg13185177	GP5	3	195601174	0.5442098	0.4825129	-25.956	0.4712729	-37.05271	0.4011229	-179.0508
cg13210534	HSPB2	11	111289538	0.5988191	0.5446165	-20.2762	0.5364614	-27.13819	0.5150192	-61.08231
cg13302154	MGP	12	14930699	0.3270447	0.2742234	-22.50198	0.2293486	-33.65224	0.2177365	-132.8549
cg13351161	SCARA3	8	27548840	0.3487075	0.3011865	-15.00596	0.2552639	-26.75452	0.2586927	-78.9156
cg13406950	GBP1	1	89303252	0.2165764	0.1732249	-21.22025	0.1959222	-39.51111	0.1442477	-80.38663
cg13726191	FGFBP1	10	33871030	0.8110358	0.463676	-13.94451	0.44191116	-32.58696	0.4563077	-23.34449
cg13993218	INS	11	2138442	0.7497115	0.6995642	-25.13888	0.6920485	-33.21061	0.6317107	-159.3924
cg1398293	TRIM63	1	26267022	0.6789252	0.6256956	-20.76249	0.6268947	-19.23466	0.580866	-89.78774
cg14127336	TCL1A	14	95250072	0.9225986	0.8874009	-41.52043	0.8602383	-121.5085	0.8583577	-139.4182
cg14175438	FAM3C	7	120823965	0.1782493	0.1394988	-20.05404	0.131112	-31.37146	0.1108461	-84.30112
cg1417895	C6orf105	6	11896868	0.2035514	0.1693501	-14.90047	0.1599657	-25.19131	0.1518926	-44.61185
cg14383674	MARPL1	10	30871030	0.8110358	0.463676	-13.94451	0.44191116	-32.58696	0.4563077	-23.34449
cg1435882	BTN3A2	6	2642772	0.6119122	0.5119361	-38.94613	0.134977	-15.22511	0.1333653	-22.0588
cg14377791	LOC400696	19	44861752	0.3668278	0.3015321	-33.88523	0.3111133	-22.71385	0.2549005	-126.9324
cg14719352	FUT1	19	53949943	0.8152085	0.7773013	-18.97921	0.7771257	-18.73707	0.7356169	-97.75568
cg14820573	C16orf33	16	42121	0.9027035	0.8751717	-18.91106	0.8751673	-19.28609	0.8625944	-50.02734
cg15037004	ZNF366	5	71839694	0.406426	0.3390606	-34.04744	0.3316357	-41.87669	0.2942723	-118.5868
cg15129294	GLIS3	19	84942868	0.8982487	0.8492688	-46.11918	0.8411918	-51.52856	0.8269586	-100.3958
cg15195412	CX3CL1	16	5964456	0.5220738	0.4699573	-17.4356	0.4642057	-21.73109	0.4011127	-125.9858
cg15226751	LZIC	1	9924498	0.8725055	0.8396399	-21.34279	0.8372506	-24.21965	0.8484859	-54.25347
cg15287183	PPP1R9A	7	94375669	0.1002601	0.06455272	-30.37303	0.07060823	-18.83208	0.0728652	-20.18356
cg15298323	ACAT2	6	160102428	0.3485804	0.2871585	-30.52308	0.2869172	-29.99595	0.2834212	-41.25911
cg15364818	CIDEB	14	23850391	0.3591790	0.2770841	-58.44732	0.2790963	-64.28399	0.2707369	-77.63215
cg15417244	PDZRN4	12	47215265	0.6286988	0.578211	-26.37461	0.57923894	-18.4737461	0.5332541	-100.32541
cg15431916	CNNM2	10	10486697	0.2571396	0.2184732	-13.92738	0.2084635	-22.76721	0.2047989	-83.93553
cg1558427	LOC221091	11	62213590	0.4550492	0.3953295	-24.28915	0.382057	-37.65408	0.3315493	-136.5602
cg15776355	C1R	12	7137031	0.3292638	0.2576123	-45.99006	0.248342	-60.12506	0.2085977	-165.2231
cg15798819	ALDH3A1	17	19591782	0.4217175	0.3727183	-15.43008	0.3663392	-20.61849	0.3070615	-121.3929
cg15804973	MAP3K5	6	137156206	0.3092636	0.1879301	-16.77436	0.1781113	-20.05262	0.1392021	-354.0796
cg15913671	TNEM105	17	76919015	0.7982829	0.7342652	-33.26833	0.7342652	-33.26833	0.7071459	-71.00225
cg16035531	FBX11	1	95589545	0.7908245	0.7538267	-15.34796	0.7495112	-19.2135	0.7378402	-39.96427
cg16127900	GPRC6A	6	117257188	0.4242073	0.3646843	-25.11488	0.3581618	-31.14591	0.3174523	-104.5138
cg16175792	HSD3B1	1	119851627	0.5872012	0.5199474	-32.67156	0.5360424	-17.14183	0.5086728	-52.96764
cg16363586	BST2	19	17377329	0.1012149	0.0715621	-19.07077	0.0655622	-29.17411	0.04996379	-80.40482
cg16470760	CD4	12	6768478	0.7169006	0.6690298	-20.06781	0.672160	-16.90989	0.6703782	-32.62286
cg16505550	PPAP2B	1	59818296	0.7446677	0.6951129	-23.92018	0.7061372	-13.2889	0.6763963	-54.82374
cg16609782	KCNJ11	11	2781940	0.633394	0.5738114	-29.8716	0.5780722	-24.82559	0.5275403	-127.7543
cg16620032	GPR4	19	50788915	0.1461679	0.1162633	-13.27905	0.1110301	-19.21907	0.09018632	-68.44662
cg16744741	PRKG2	4	82345049	0.4130004	0.3015554	-10.8242	0.3068185	-93.94085	0.2761017	-181.9251
cg16853860	TAP1	6	32931094	0.5305844	0.4745823	-24.72634	0.4641004	-34.65625	0.398592	-161.8755
cg16899306	H1A-DOB2	6	32840663	0.8137879	0.751075	-54.78106	0.7207951	-11.81742	0.7098831	-158.5329
cg16929104	GDF15	19	16387968	0.3727304	0.3257593	-15.48488	0.3212976	-16.53295	0.3217032	-22.44041
cg1704109	CY55B1D1	1	10981370	0.5671717	0.5010813	-31.49679	0.5090166	-22.23914	0.436949	-148.849
cg17199483	ABCC1	16	15950268	0.08195233	0.05248223	-22.35547	0.05439414	-18.53285	0.04074909	-58.37799
cg17267907	DEFA1	8	8625344	0.7333763	0.6671795	-43.19177	0.6872249	-19.2135	0.6768863	-36.61
cg17339202	SYNC1	1	32933487	0.1312798	0.09958176	-47.1676	0.0789833	-56.94889	0.07016526	-92.93568
cg17378989	ERCC1	1	50618591	0.1247918	0.0923033	-19.23399	0.09523379	-14.88144	0.09561832	-19.00123
cg17408986	CHCHD3	3	127850265	0.9688609	0.9107689	-25.59146	0.9129765	-22.77338	0.2969343	-48.99615
cg17421623	C3orf1	3	12057050	0.2554711	0.1804959	-45.47247	0.1731723	-40.38744	0.1385562	-193.8794
cg17471102	FUT3	19	5802255	0.7067176	0.5702834	-15.5132	0.5592297	-209.1358	0.4779872	-354.0796
cg17720233	TNFAIP6L2	1	149394934	0.7694218	0.7236131	-22.48217	0.7206097	-25.16337	0.7020809	-58.53433
cg17786776	FKBP9	7	32862670	0.6312266	0.5720237	-26.00779	0.5690912	-37.106	0.5450161	-67.16508
cg1786959	MT2A	16	551							

cg21663431	SLC44A2	19	10597355	0.8710043	0.8369463	-22.75285	0.8338655	-26.67247	0.8362402	-29.12044
cg21680178	GPATC3	1	27099447	0.105004	0.07157529	-24.72383	0.06989522	-27.13619	0.0813179	-14.13406
cg21985470	PKLR	1	15353847	0.87204	0.8399609	-20.16894	0.8405003	-19.02258	0.8082746	-90.78716
cg22044451	TUBA3	12	47893763	0.6115999	0.587263	-13.05343	0.5490371	-27.93532	0.5075012	-95.80119
cg22197830	C5orf14	5	134237683	0.7913385	0.7274389	-50.90396	0.7501988	-19.34814	0.6967705	-121.095
cg22226839	ATP2B4	1	201862674	0.324451	0.2457086	-57.91495	0.2470613	-54.63404	0.242913	-70.71608
cg22253945	GPR45	2	105224921	0.8819357	0.8559448	-13.9797	0.8524827	-18.01044	0.8400479	-45.17864
cg22580512	NCOR2	12	123568427	0.8349384	0.7366107	-148.0313	0.7321865	-159.7668	0.6282698	-354.0796
cg22730004	SPTA1	1	156923342	0.1945941	0.1464576	-31.32529	0.1398761	-41.31995	0.1131671	-118.2706
cg22749425	GGT1	22	23309664	0.7322585	0.6534526	-61.97991	0.6623821	-46.40129	0.5884476	-223.5157
cg22830895	CRYGN	7	150768409	0.4208398	0.3534539	-33.46381	0.3323681	-61.48236	0.335905	-64.37744
cg22892904	CBX2	17	75365684	0.2876134	0.2460204	-14.28341	0.2439826	-15.68627	0.2396165	-25.09639
cg22905881	CD4	12	6769236	0.3750396	0.3280909	-15.24077	0.3164738	-25.1009	0.3077535	-41.96901
cg22947000	BCMO1	16	79829782	0.1816216	0.1480006	-13.91398	0.1309284	-36.65204	0.1281227	-49.55472
cg23061257	YIPF1	1	54127860	0.1551732	0.1103864	-33.28962	0.1166855	-22.44753	0.108699	-42.65144
cg23067535	FAM83A	8	124264314	0.7437372	0.6543494	-83.18351	0.628466	-82.8336	0.6117385	-194.8828
cg23124451	CBX7	22	37878077	0.6507345	0.5122378	-167.6718	0.4700181	-294.8397	0.4663452	-320.7212
cg23282949	RENBP	X	152864903	0.8968359	0.8721508	-14.57364	0.8568401	-39.48046	0.8527325	-56.44999
cg23322523	TRIM55	8	67201595	0.7533504	0.7096	-18.91834	0.7029912	-25.11024	0.6924413	-45.38811
cg23352030	PRIC285	20	61668913	0.9353507	0.8992279	-51.58812	0.9128703	-19.03117	0.8481328	-263.2675
cg23665958	BCL10	1	85517641	0.6873814	0.6439888	-14.67131	0.6387542	-18.58012	0.5803967	-113.23257
cg23679724	CTSZ	20	57014873	0.771009	0.7174453	-30.57389	0.7172462	-30.00099	0.6918026	-78.23668
cg23762517	HIVEP3	1	42156697	0.2853161	0.1728565	-151.7051	0.178654	-131.9892	0.1544374	-231.1706
cg24012925	SRXN1	20	581418	0.1777895	0.1453408	-13.07971	0.1356142	-24.13297	0.1158572	-70.04457
cg24058132	GALC	14	87529619	0.5421203	0.4787577	-27.52561	0.486671	-19.84936	0.4375028	-93.05412
cg24330042	GSTT1	22	22714159	0.0921893	0.06588621	-15.51082	0.1410156	44.31931	0.06502655	-21.32696
cg24341800	ACAT1	11	107497286	0.2117008	0.1714588	-18.18376	0.1721956	-17.00681	0.1758029	-17.85216
cg24429636	LHD	16	73708245	0.6230753	0.4670582	-210.5889	0.5268039	-73.90016	0.4950964	-146.71
cg24816298	PTH	11	13475601	0.7246433	0.6711123	-26.43134	0.6213718	-104.3404	0.6566975	-38.72764
cg24833277	FAM83A	8	124263542	0.8908029	0.84264	-50.99458	0.8460475	-42.50347	0.8296934	-90.75523
cg24857721	RHD	1	25471642	0.617856	0.5558915	-28.21996	0.5654922	-18.85444	0.5144179	-95.22674
cg24875415	CST4	20	23617470	0.8770348	0.8416546	-26.01077	0.8319197	-41.98254	0.8384681	-37.19241
cg24921858	BCL2L14	12	12115256	0.4280857	0.3791791	-15.56054	0.3722857	-20.8328	0.3398042	-68.94533
cg25017250	APOC4	19	50137553	0.5961902	0.5369097	-16.06915	0.5391786	-14.01334	0.5090104	-51.10353
cg25068857	GNLY	7	85717493	0.7254441	0.6591101	-38.21384	0.6787733	-16.54465	0.625451	-101.7388
cg25136926	DDX12	12	9493486	0.7040716	0.6559412	-19.49061	0.6615991	-14.31994	0.6209011	-71.87038
cg25165880	ACOT7	1	6376913	0.2043196	0.1694282	-13.38187	0.1622767	-20.57392	0.1468505	-51.42184
cg25218351	TRIM54	2	27358950	0.8328992	0.792357	-24.65364	0.7920827	-24.40263	0.7606903	-89.42401
cg25256723	F5	1	167822568	0.7105737	0.6220706	-73.74373	0.6030378	-109.3415	0.5487592	-268.658
cg25268716	PSME1	14	23674551	0.5719652	0.5269256	-13.51428	0.5112184	-24.87027	0.4752236	-80.08691
cg25310567	GALNTL5	7	151218423	0.8438885	0.8943569	-26.76747	0.8849735	-26.05774	0.8061853	-172.8839
cg25538571	FLJ46365	8	49656263	0.3857584	0.3283307	-24.15179	0.3174008	-35.35526	0.2814884	-104.9487
cg25557858	EXTL3	8	28614517	0.1288604	0.0957425	-19.12427	0.09435438	-20.77088	0.0886004	-36.93114
cg25564800	KPNA1	3	123716824	0.1085727	0.08041912	-15.60829	0.08044456	-15.22511	0.06905092	-40.87834
cg25771201	SCDR10	19	5630653	0.907773	0.8838441	-15.39915	0.87775	-24.49479	0.8424509	-125.2049
cg25909905	ITGA2B	17	39623254	0.6346756	0.5622411	-40.97349	0.5513499	-54.55177	0.5045612	-153.7741
cg25922709	RASA3	9	19038850	0.1807594	0.1230309	-21.05669	0.1245477	-18.33866	0.1017442	-69.82596
cg25915982	GRB10	7	50816909	0.8522021	0.8199136	-17.3407	0.8130377	-25.63407	0.7634231	-144.5381
cg2599474	ADH1C	4	100492992	0.4726717	0.4265333	-13.19249	0.4251884	-13.71175	0.3871491	-62.18964
cg26119740	PPME1	11	73559653	0.1875707	0.1426717	-27.03959	0.1400189	-30.30882	0.1314453	-53.28797
cg26128441	P2RX3	11	56881915	0.9041345	0.8806878	-14.13474	0.8808575	-13.55926	0.8788829	-21.08787
cg26143719	C10orf16	22	35914173	0.868539	0.8294892	-29.80188	0.8004308	-89.76324	0.7498895	-266.0611
cg26229676	ZNF581	19	60846184	0.2161359	0.1694194	-25.46974	0.1754344	-17.92093	0.1693936	-31.02465
cg26267561	OXT	20	3000224	0.7993829	0.7429046	-40.88748	0.7149252	-91.4335	0.6439264	-314.9143
cg26394940	FLJ10945	22	44828125	0.1340013	0.07049432	-90.09142	0.07173273	-85.17302	0.05783389	-150.4443
cg26580095	BTBD8	1	92318238	0.4472275	0.3742761	-38.96939	0.3648451	-50.28468	0.3462775	-89.87976
cg26581729	NPDC1	9	139059613	0.4418344	0.3428852	-77.89127	0.3671974	-40.13657	0.3000652	-188.3554
cg26614073	SCAP	3	47492823	0.4955871	0.3872084	-91.46643	0.3589535	-152.7899	0.3378962	-225.5599
cg26628847	PIP	7	142539426	0.7061286	0.6585046	-18.0849	0.661655	-16.09482	0.6018243	-112.8273
cg26673195	GSPC	17	38306255	0.5431584	0.4905401	-17.98677	0.4775415	-29.12919	0.4138118	-144.1031
cg26823505	CLPS	6	35873567	0.5404626	0.4831643	-21.89124	0.4876231	-17.79844	0.4267643	-110.4877
cg26847866	SCARA3	8	27547996	0.6720755	0.5945624	-51.1212	0.5807397	-17.74827	0.5213217	-218.413
cg26884581	PYGM	11	64283990	0.8489541	0.8177189	-15.66057	0.8165218	-16.71948	0.802942	-42.38471
cg26987645	FMOD	1	201587009	0.4245825	0.3109714	-108.6062	0.3308576	-69.98154	0.3138541	-112.36226
cg27016307	HRC	18	54380725	0.4441126	0.345825	-76.88531	0.3347009	-96.38995	0.2961939	-354.0796
cg27031230	SLC11	16	49273090	0.5594671	0.4940704	-29.91157	0.5121567	-13.83252	0.4528368	-97.17306
cg27112247	TMED2	12	122634284	0.441677	0.3744161	-32.50489	0.3829506	-23.06379	0.3717043	-41.79631
cg27210390	TOM1L1	17	50333582	0.4995541	0.4212053	-44.49513	0.3960351	-81.96963	0.3554613	-184.5669
cg27235662	CLDN16	3	191588680	0.7749882	0.7295283	-22.71526	0.7376781	-14.25232	0.687082	-99.26525
cg27236973	KRT17	17	37035523	0.1449301	0.1137504	-14.80072	0.1059825	-24.86033	0.1001308	-42.12353
cg27446185	VITGN1	1	117555488	0.7922848	0.7514774	-19.5257	0.7548881	-15.78338	0.6996889	-116.3049
cg27552599	DHX35	20	37023885	0.1557893	0.1159592	-25.27202	0.1171501	-22.56957	0.1259802	-16.08888

Table S3. List of 150 CpG loci significantly hypermethylated in centenarians' offspring vs offspring of non long-lived parents. Columns indicate: Illumina Probe ID (ILMNID), NCBI gene symbol of associated gene (SYMBOL), chromosome localisation (CHR) and map informations (MAPINFO). For each probe we reported AVG beta in each group and Diff Score, that indicates the level of significance between the 2 groups.

ILMNID	SYMBOL	CHR	MAPINFO	CENTENARIANS' OFFSPRING.AVG_Beta	LONG-LIVED OFFSPRING.AVG_Beta	DIFFSCORE
cg1007201	CLEC4A	12	8196472	0.9058203	0.8747801	16.48852
cg1026741	NAP1L5	1	89838076	0.6711563	0.5996045	33.78366
cg0118508	ZNF710	15	88344817	0.6588492	0.5777963	45.18841
cg0151265	PCDH3	5	140461151	0.3482213	0.2910347	16.02714
cg0167175	CMTM8	3	32254265	0.5210842	0.45922	18.12009
cg0188856	MEST	7	129913749	0.08135256	0.04772861	23.56815
cg0208257	CLEC4A	12	8167985	0.3669071	0.3106213	16.4786
cg0209652	FCF116	X	76586156	0.8536305	0.8171788	15.42934
cg0219665	NOL10	2	10748215	0.3744256	0.2907426	49.6485
cg0227666	CTNNA1	5	138116341	0.3660563	0.2972512	29.26704
cg0229800	RAB39B	X	154147098	0.3246999	0.2462328	29.26704
cg0260366	RPS21	20	60395435	0.03154509	0.009576178	29.26704
cg0284750	SOX3	X	139414850	0.5017757	0.4355108	29.26704
cg0319082	CY4F11	19	15909788	0.1748005	0.1266311	29.26704
cg0321469	SEC14L4	22	29231532	0.1403483	0.1042111	29.26704
cg0333616	SLC22A18	11	2887571	0.7015352	0.6012433	29.26704
cg0348362	KCNA3	1	111019799	0.3596648	0.3031791	29.26704
cg0366545	LOC158160	10	38685382	0.1822067	0.1142037	29.26704
cg0370438	ZNF169	9	96061822	0.9160351	0.8062755	29.26704
cg0387412	ARHGAP2	6	109275828	0.494431	0.4185771	29.26704
cg0388230	TRIM50C	7	72077882	0.8609829	0.8123671	29.26704
cg0388778	CTSW	11	65404108	0.2112481	0.1622314	29.26704
cg0472620	SLC22A18	11	2887061	0.7836428	0.7306587	29.26704
cg0500044	MGC1945	9	39032395	0.253095	0.2039423	29.26704
cg0507200	FIGL1	7	50486141	0.3883249	0.3311644	29.26704
cg0519472	NRP2	12	2814741	0.4020761	0.3249024	29.26704
cg0547152	STK6	20	54402011	0.3515774	0.2836455	29.26704
cg0551275	UGT3A1	5	36027492	0.393362	0.3386148	29.26704
cg0553511	CHST4	16	70117080	0.4242371	0.3624282	29.26704
cg0572610	GP1BB	22	18089755	0.8805739	0.8351569	29.26704
cg0589704	HRASL3	11	63138719	0.2445276	0.1984742	29.26704
cg0605165	PDDZ4	X	152749880	0.2301341	0.186302	29.26704
cg0633121	COG2	7	16472127	0.3556928	0.3031003	29.26704
cg0641060	TSPAN6	X	89770449	0.2116177	0.1672570	29.26704
cg0649478	KIERS2	12	51261713	0.6141715	0.5318322	29.26704
cg0663845	FAM107A	3	58538309	0.7242832	0.6610957	29.26704
cg0681284	TRPM2	21	44598210	0.4488589	0.379546	29.26704
cg0742314	CHIL3	1	201422869	0.4990132	0.4209464	29.26704
cg0745327	NDUFA3	19	69297516	0.164499	0.2519505	29.26704
cg0760132	SLC38A4	12	45506108	0.3694968	0.2549278	29.26704
cg0774279	C21orf56	21	46428480	0.2062344	0.1238415	29.26704
cg0804469	BRD4	19	15252927	0.3288558	0.2731871	29.26704
cg0812621	KAAG1	6	24465699	0.2731546	0.2186189	29.26704
cg0869486	FLJ30048	13	77219585	0.8005941	0.5335224	29.26704
cg0851045	B5N	3	4956512	0.2862822	0.2176569	29.26704
cg0851640	C14orf166	14	51525512	0.3111252	0.2575823	29.26704
cg0900938	PKP1	1	199519597	0.35288	0.2970912	29.26704
cg0937748	BIRC8	19	58486766	0.8021271	0.7462544	29.26704
cg0958204	ITR	13	94051677	0.3034467	0.2518176	29.26704
cg0987131	H0X2	7	27108207	0.2381952	0.1825476	29.26704
cg0994835	FLJ2504	2	70042596	0.5442603	0.4786369	29.26704
cg1029623	C21orf56	21	46429602	0.3855833	0.2897246	29.26704
cg1036247	SHANK2	11	70185473	0.578801	0.4856244	29.26704
cg1046870	PTGER1	19	14446209	0.7650406	0.7011663	29.26704
cg1077126	TCF21	6	134251673	0.2496838	0.1756231	29.26704
cg1089538	ECRG4	2	106049072	0.5456443	0.4403558	29.26704
cg1104930	KIA1166	X	641134716	0.2443512	0.1903068	29.26704
cg1112613	FLJ14834	13	30378304	0.2479834	0.1747009	29.26704
cg1123542	DUSP22	6	237622	0.3060670	0.1818786	29.26704
cg1129100	ARHGEP9	X	62891792	0.5287751	0.4725753	29.26704
cg1146977	ARHGEP4	2	131390671	0.4060053	0.3503547	29.26704
cg1150072	CHNF	19	47586285	0.512978	0.4511062	29.26704
cg1161857	KRTCAF3	2	27519047	0.7484122	0.6912776	29.26704
cg1255807	MBP	18	72874110	0.6862947	0.616442	29.26704
cg1256445	CETP	16	55553341	0.6451489	0.5887925	29.26704
cg1271720	FLJ90036	4	114342	0.126605	0.0847067	29.26704
cg1290764	SAAT	11	18226917	0.5525165	0.4931746	29.26704
cg1297365	CHNF	19	47586293	0.3026898	0.2438908	29.26704
cg1310590	KIA0233	14	23969894	0.1709462	0.1176398	29.26704
cg1316430	CDA	1	20770604	0.7678744	0.7225301	29.26704
cg1350742	KLHDC7A	1	18680137	0.8202931	0.7778499	29.26704
cg1356043	KFZP78111	5	56284344	0.1337178	0.2504783	29.26704
cg1383720	PAGE5	X	55263702	0.7702178	0.7204388	29.26704
cg1444810	MATN4	20	4336970	0.9128964	0.8814726	29.26704
cg1457036	RAPP2	X	131178224	0.4198136	0.3261118	29.26704
cg1457882	RPS6KC1	1	211291025	0.4334208	0.3487341	29.26704
cg1465473	FLJ30834	4	122904595	0.5697716	0.506355	29.26704
cg1475343	ALX4	11	44261409	0.3761834	0.3108526	29.26704
cg1480730	AR	X	66880170	0.816828	0.7861701	29.26704
cg1491139	SEMA3B	3	50286217	0.1667752	0.1264965	29.26704
cg1492084	NAV1	1	199864502	0.5835653	0.5183972	29.26704
cg1497398	TETRA2	4	2905480	0.2877994	0.2243257	29.26704
cg1524803	CCIN	9	36159949	0.3750819	0.3192108	29.26704
cg1537568	TBX22	X	79164589	0.3792685	0.3136004	29.26704
cg1538312	DUSP22	6	236909	0.3925775	0.2639296	29.26704
cg1548437	SAAT	11	18244223	0.5062668	0.4343419	29.26704
cg1553623	H2BFS	21	43809520	0.479108	0.419566	29.26704
cg1558481	SLC38A4	12	45503893	0.3358932	0.2133897	29.26704
cg1569164	SLC17A3	6	25990307	0.7703478	0.7223748	29.26704
cg1572053	AGPAT2	9	138702406	0.6285096	0.5262718	29.26704
cg1579268	FLJ90036	4	114693	0.1135461	0.0697849	29.26704
cg1581295	VCY	Y	14877478	0.5937284	0.5163629	29.26704
cg1590178	KCTD12	13	76359427	0.7607736	0.7154112	29.26704
cg1600329	PLINC1	6	83457929	0.6780141	0.6185507	29.26704
cg1607594	FLJ37396	6	109664391	0.608	0.538902	29.26704
cg1608055	TACSTD2	1	58815787	0.460412	0.4003999	29.26704
cg1647469	MGC3207	19	13736014	0.3014212	0.1962413	29.26704
cg1650904	TRPM6	9	76692783	0.2715708	0.222452	29.26704
cg1654734	USP29	19	62322503	0.6900259	0.592893	29.26704
cg1654752	FLJ3790	11	74818328	0.6867868	0.6068288	29.26704
cg1689361	ALX3	1	110415973	0.841393	0.8045731	29.26704
cg1706619	SYCE1	10	135233117	0.4067155	0.3469113	29.26704
cg1768796	KLK3	19	56050056	0.7267419	0.6725357	29.26704
cg1779165	POU3F1	1	38286076	0.6434201	0.555832	29.26704
cg1806219	HDH40	17	54997457	0.8177519	0.7749996	29.26704
cg1853076	SULT1A1	16	28542345	0.0857085	0.0583054	29.26704
cg1893416	STARDB	18	50136187	0.4568523	0.3890576	29.26704
cg1909443	BCAR1	16	73843510	0.5495519	0.4846034	29.26704
cg1948627	DB2	11	47192476	0.1073998	0.0739193	29.26704
cg1949744	SLC22A18	11	2887370	0.8845521	0.8503212	29.26704
cg1976274	CRX	19	53016901	0.2539462	0.2048472	29.26704
cg1978646	C21orf128	21	42401274	0.0526476	0.05996704	29.26704
cg2025191	GLTP2	17	8570149	0.8578737	0.4944427	29.26704
cg2054042	PPP4R2	3	73128376	0.5150797	0.4468043	29.26704
cg2058716	MGC33407	19	8669829	0.426839	0.3519028	29.26704
cg2083170	SEC31L2	10	102269363	0.6351607	0.5551777	29.26704
cg2108029	PRPS1	X	106758134	0.1875643	0.1424033	29.26704
cg2130677	FLJ44881	18	72539998	0.6886059	0.6130321	29.26704
cg2183244	TTCC	21	37360393	0.5132032	0.5135027	29.26704
cg2198088	TP53TG3	16	32171905	0.5948204	0.534114	29.26704

g2215892	FLJ39237	7	100610889	0.5304557	0.4449231	29.26704
g2218901	FGF22	19	591348	0.755807	0.7029672	29.26704
g22269967	S100P	4	6746599	0.366414	0.3069793	29.26704
g22381194	DHODH	16	70598977	0.3839963	0.3224816	29.26704
g2243290	KLRC2	12	10479483	0.8110396	0.7421967	29.26704
g2247229	ZNF577	19	57083292	0.6279387	0.5609133	29.26704
g22778981	ERBB2	17	35109659	0.4698896	0.4077442	29.26704
g22825487	VNN3	6	133096876	0.2991657	0.2485382	29.26704
g23137494	SLC16A2	X	73556534	0.365716	0.3086705	29.26704
g2314905	MMP17	12	130878158	0.6216299	0.7339891	29.26704
g23159337	ATP13A4	3	184755472	0.5607895	0.4599691	29.26704
g23163644	TCEAL2	X	101267674	0.1670968	0.1191814	29.26704
g23616741	PGAM2	7	44071959	0.4442845	0.3579283	29.26704
g24127874	HES6	2	238814598	0.2794232	0.219719	29.26704
g24831427	COQ3	6	99949074	0.78253	0.7350434	29.26704
g24883857	ARSB	5	78317855	0.4871896	0.43322	29.26704
g25193494	FLJ20186	16	88543505	0.7001533	0.6369217	29.26704
g2542763	CYP2A7	19	46081197	0.8495561	0.8050985	29.26704
g2568318	ACRBP	12	6626349	0.635309	0.5668334	29.26704
g25912611	STK6	20	54402033	0.2993129	0.2306572	29.26704
g2605775	PGAM2	7	44071460	0.4787578	0.4211679	29.26704
g26133324	LOESA	1	150861946	0.3324185	0.269443	29.26704
g2664745	C4orf17	4	100651185	0.504596	0.4407295	29.26704
g2695266	CTHRC1	8	104452675	0.07926963	0.04038038	29.26704
g2717834	CSH2	17	59304304	0.8752692	0.8430981	29.26704
g27182761	PHLDA1	12	74712860	0.3706783	0.3166243	29.26704
g2739448	C15orf2	15	22472147	0.833357	0.7803816	29.26704
g2765586	CS19L	20	23497455	0.7144582	0.6581914	29.26704
g1077126	TCF21	6	134251673	0.2496838	0.175231	29.26704
g3665457	LOC158160	10	38665382	0.1822067	0.1142037	29.26704

Table S4. List of 67 CpG loci significantly hypomethylated in centenarians/offspring vs offspring of non long-lived parents. Columns indicate: Illumina Probe ID (ILMNID), NCBI gene symbol of associated gene (SYMBOL), chromosome localisation (CHR) and map informations (MAPINFO). For each probe we reported AVG beta in each group and Diff Score, that indicates the level of significance between the 2 groups.

ILMNID	SYMBOL	CHR	MAPINFO	CENTENARIANS' OFFSPRING.AVG_Beta	OFFSPRING OF NON LONG-LIVED PARENTS.AVG_Beta	DiffScore
cg00695416	CBR1	21	36364346	0.02625524	0.0599491	-32.501
cg00729708	LASS3	15	98901965	0.5210772	0.5806562	-17.00673
cg00750606	CDA	1	20771708	0.7162282	0.77032	-24.03238
cg00894577	SLC6A14	X	115482720	0.3670236	0.4439165	-34.88451
cg01626227	TRIM4	7	99355225	0.02149694	0.04910073	-21.35977
cg01903378	ZNF645	X	22201351	0.4415189	0.5070216	-21.39557
cg02286642	ZNF254	19	24061913	0.05308367	0.081513	-13.92137
cg03146158	MYO1E	15	57452437	0.02085402	0.05670013	-40.98652
cg03060258	GNAS	20	56860330	0.5857949	0.6423887	-16.57705
cg04612566	C8orf31	8	144192081	0.5699517	0.6466464	-37.7047
cg04738970	HOUK2	3	126831301	0.2294626	0.2893352	-30.01746
cg04836038	DOCK9	13	98537383	0.1121584	0.1492027	-14.66257
cg05105069	TCEAL7	X	102472010	0.2497188	0.3058061	-19.65026
cg05163071	RETNLB	3	109959230	0.5522572	0.6108653	-17.00673
cg05592527	ARMCX6	X	100759644	0.2028322	0.2533108	-18.12009
cg05801444	VPS28	8	145629443	0.5329066	0.6004692	-24.98316
cg05903362	ARHGAP4	X	152945948	0.10230721	0.1775576	-59.51278
cg06274159	ZFP42	4	189153861	0.0703513	0.1101126	-25.91772
cg06378976	TFEB	6	41811591	0.1953826	0.2445421	-17.97049
cg06799664	DNAH1	17	74078716	0.7875283	0.8272511	-15.35457
cg06809565	CXorf12	X	152889981	0.1016981	0.1440083	-23.02919
cg06873352	LYK5	17	59173747	0.1696681	0.2124577	-14.86253
cg07465884	YTHDC2	5	112877061	0.2713465	0.3385677	-29.50736
cg07770222	C8orf1	8	144191481	0.4851994	0.5531039	-23.02919
cg08015232	SLC12A5	20	44090522	0.5956001	0.6502197	-15.16856
cg09324116	FAM51A1	X	13856202	0.058913	0.0934184	-21.66043
cg10051054	CCDC27	1	3659032	0.8027164	0.8454887	-21.9237
cg10117369	LAX1	1	202000879	0.298004	0.3515861	-14.70446
cg10699098	OLP2	19	19509555	0.4365512	0.4930763	-13.88079
cg10742801	PRAP1	10	135011037	0.3690253	0.4257841	-14.86253
cg10801213	SLC7A3	X	70067447	0.1354528	0.178301	-17.91682
cg10839723	TBL1X	X	9392900	0.06423201	0.09375927	-13.10461
cg12067261	INSL4	9	5221539	0.8376483	0.8756055	-21.65477
cg12215675	TTL2	6	167658584	0.8822597	0.9198208	-36.17066
cg13853761	C11orf2	11	64819808	0.9043539	0.9292844	-14.86253
cg14159672	FLI32569	1	204028902	0.1852226	0.3992492	-33.9177
cg14893161	FLI32569	1	204085874	0.3285304	0.5061365	-27.15013
cg14917512	GNA11	19	3045685	0.1402024	0.1874757	-22.40688
cg14931645	ZNF672	1	247099901	0.01654672	0.03900597	-13.37192
cg14986136	WBP5	X	102497909	0.1718055	0.2194878	-18.46742
cg15271816	RUSC2	9	35480516	0.1278272	0.1657644	-13.42975
cg16022279	ZNF185	X	151837379	0.6623265	0.7136184	-15.76134
cg16029957	QPCT	2	37425956	0.05102433	0.08117201	-17.78816
cg17006282	RPL36	19	5640943	0.6965396	0.7586682	-32.501
cg17238009	C10orf11	10	77212588	0.76162	0.8043618	-15.73526
cg17687883	MTHFD2	2	74278975	0.03926801	0.09649727	-89.51278
cg17718322	OPHN1	X	67570474	0.07890269	0.1195996	-26.15465
cg17765461	DAZP1	19	1359416	0.03249041	0.05780741	-14.05583
cg17829936	TARL5	6	132952374	0.8046887	0.8578239	-42.47289
cg17880859	RBBP7	X	16798335	0.0185628	0.05741211	-51.17289
cg18364820	CXorf38	X	40391693	0.07768952	0.1169911	-24.32239
cg18636641	PPAPDC3	9	133155089	0.6864967	0.7349071	-14.72395
cg20051589	DLG3	X	69581207	0.1865612	0.2363228	-19.09147
cg20439022	SLC16A8	22	36808733	0.5538581	0.08369539	-15.67545
cg21098323	OSCAR	19	59297454	0.8733242	0.7338605	-26.87699
cg21126707	MYF5	12	79035143	0.445066	0.5004501	-14.01127
cg21950518	IL6ST	5	55326503	0.06458467	0.09758317	-17.97887
cg23110514	LCE3E	1	150805512	0.6467896	0.7061541	-22.94379
cg23486067	PLSCR1	3	147745021	0.03228794	0.05874353	-15.88778
cg23629496	C20orf75	20	5962446	0.6428477	0.7101136	-32.501
cg24330942	GGTT1	22	22714158	0.06580821	0.1410156	-16.37222
cg24429836	LDHD	16	73708245	0.4670582	0.5286608	-16.57705
cg26267310	DHRS10	19	54032405	0.04300893	0.09429372	-68.1463
cg27519424	HLC5	21	37284290	0.0598947	0.09114889	-16.57705
cg07770222	C8orf31	8	144191481	0.4861994	0.5531039	-23.02919
cg13853761	C11orf2	11	64819808	0.9043539	0.9292844	-14.86253
cg24928161	SHBG	17	7473840	0.8133382	0.8535168	-20.07014

Table S5. White Blood Cell Count and Differential in centenarians' offspring and offspring of non long-lived parents. Data are presented as mean \pm SD. P value has been calculated by t-test. NS: not significant.

	Centenarians' offspring	Offspring of non long-lived parents	P
Leukocytes ($10^3/\text{mm}^3$)	6.26 \pm 1.34	6.53 \pm 1.64	NS
Neutrophils (%)	55.05 \pm 6.8	57.45 \pm 8.58	NS
Lymphocytes (%)	32.02 \pm 5.98	29.43 \pm 8.40	NS
Monocytes (%)	6.07 \pm 1.25	5.76 \pm 1.23	NS
Eosinophils (%)	4.39 \pm 3.08	2.73 \pm 1.31	NS
Basophils (%)	0.57 \pm 0.22	0.47 \pm 0.32	NS
Neutrophils ($10^3/\text{mm}^3$)	3.59 \pm 1.07	3.73 \pm 1.13	NS
Lymphocytes ($10^3/\text{mm}^3$)	2.04 \pm 0.57	1.77 \pm 0.55	NS
Monocytes ($10^3/\text{mm}^3$)	0.36 \pm 0.12	0.34 \pm 0.09	NS
Eosinophils ($10^3/\text{mm}^3$)	0.27 \pm 0.20	0.18 \pm 0.10	NS
Basophils ($10^3/\text{mm}^3$)	0.04 \pm 0.02	0.04 \pm 0.03	NS