

Table S2. Markers used for the ancestral study.

Chromosome	Start	End	N° of markers	N° of markers after LD filtering	Genes
chr1	35225291	35225439	8	3	GJB4
chr1	35226483	35229375	156	48	GJB4
chr1	35246739	35247429	13	4	GJB3
chr1	35247828	35248093	10	4	GJB3
chr1	35250288	35252020	74	25	GJB3
chr1	152274600	152287273	1068	235	FLG
chr1	152287744	152288003	6	0	FLG
chr1	152297614	152297729	2	1	FLG
chr1	153232125	153232259	3	0	LOR
chr1	153233351	153234650	30	14	LOR
chr1	155204188	155205685	41	14	GBA
chr1	155205922	155206310	15	8	GBA
chr1	155207081	155207419	5	0	GBA
chr1	155207672	155208147	14	2	GBA
chr1	155208257	155208732	10	4	GBA
chr1	155209126	155209603	15	4	GBA
chr1	155209626	155210140	16	4	GBA
chr1	155210370	155210558	5	0	GBA
chr1	155210826	155211119	9	3	GBA
chr1	155213835	155214074	8	2	GBA
chr1	155214246	155214703	18	7	GBA
chr2	128014815	128015353	17	5	ERCC3
chr2	128016821	128020508	104	36	ERCC3
chr2	128028861	128029079	1	0	ERCC3
chr2	128030390	128030587	4	1	ERCC3
chr2	128036698	128037003	5	1	ERCC3
chr2	128037972	128038257	11	2	ERCC3
chr2	128044228	128044643	10	2	ERCC3
chr2	128046185	128046490	11	3	ERCC3
chr2	128046862	128048215	35	7	ERCC3
chr2	128049960	128050472	14	6	ERCC3
chr2	128051038	128051802	36	10	ERCC3
chr2	159813999	159963000	4049	578	INTERGENIC
chr2	215796215	215797515	35	7	ABCA12
chr2	215798751	215798989	6	2	ABCA12
chr2	215802183	215802389	7	1	ABCA12
chr2	215807598	215807791	5	2	ABCA12
chr2	215809674	215809878	5	1	ABCA12
chr2	215812095	215812330	1	1	ABCA12
chr2	215813269	215813511	5	1	ABCA12
chr2	215813713	215813923	7	3	ABCA12
chr2	215815552	215815857	8	4	ABCA12
chr2	215818527	215818881	10	3	ABCA12
chr2	215819875	215820135	15	3	ABCA12
chr2	215821336	215821552	5	1	ABCA12
chr2	215822950	215823228	7	2	ABCA12
chr2	215823697	215823852	7	1	ABCA12
chr2	215831521	215831727	7	1	ABCA12
chr2	215833393	215833581	5	1	ABCA12
chr2	215834946	215835174	12	2	ABCA12

chr2	215838622	215838816	3	1	ABCA12
chr2	215839451	215839638	5	2	ABCA12
chr2	215840458	215840811	12	0	ABCA12
chr2	215842989	215843240	4	0	ABCA12
chr2	215843477	215843814	15	2	ABCA12
chr2	215845156	215845417	11	1	ABCA12
chr2	215846860	215847157	6	2	ABCA12
chr2	215848320	215848639	8	5	ABCA12
chr2	215851215	215851502	8	3	ABCA12
chr2	215852320	215852567	4	0	ABCA12
chr2	215854002	215854395	6	3	ABCA12
chr2	215855375	215855805	9	2	ABCA12
chr2	215862368	215862583	10	3	ABCA12
chr2	215865378	215865794	11	1	ABCA12
chr2	215866231	215866511	6	1	ABCA12
chr2	215868882	215869073	6	1	ABCA12
chr2	215872400	215872620	3	0	ABCA12
chr2	215875004	215875244	2	1	ABCA12
chr2	215876112	215876423	10	5	ABCA12
chr2	215876644	215876909	11	2	ABCA12
chr2	215880163	215880437	9	2	ABCA12
chr2	215882681	215882906	5	2	ABCA12
chr2	215884009	215884570	17	3	ABCA12
chr2	215890346	215890553	5	1	ABCA12
chr2	215891493	215891712	6	1	ABCA12
chr2	215896494	215896860	6	2	ABCA12
chr2	215901626	215901839	8	3	ABCA12
chr2	215910510	215910789	10	1	ABCA12
chr2	215914299	215914585	8	1	ABCA12
chr2	215917160	215917358	7	0	ABCA12
chr2	215919246	215919438	3	0	ABCA12
chr2	215928738	215928992	6	2	ABCA12
chr2	215940164	215940390	5	3	ABCA12
chr2	215976269	215976463	6	0	ABCA12
chr2	216002812	216003201	7	2	ABCA12
chr3	3742447	3744195	75	22	INTERGENIC
chr3	3819358	3819537	7	2	INTERGENIC
chr3	3820874	3821056	3	0	INTERGENIC
chr3	3822985	3824435	65	26	INTERGENIC
chr3	3830547	3830808	10	5	INTERGENIC
chr3	3836872	3837162	11	4	INTERGENIC
chr3	3839534	3839948	12	3	INTERGENIC
chr3	3841345	3841630	5	3	LRRN1
chr3	3842334	3842609	7	4	LRRN1
chr3	3864367	3864631	11	1	LRRN1
chr3	3868875	3869243	9	2	LRRN1
chr3	4046822	4046930	3	1	INTERGENIC
chr3	4110202	4110479	9	5	INTERGENIC
chr3	4270943	4271082	7	3	INTERGENIC
chr3	4402778	4403988	62	28	SUMF1
chr3	4417963	4418123	6	3	SUMF1
chr3	4452498	4452712	7	1	SUMF1
chr3	4458761	4458976	2	1	SUMF1

chr3	4459643	4459866	10	2	SUMF1
chr3	4461697	4461880	10	3	SUMF1
chr3	4490899	4491074	6	2	SUMF1
chr3	4494509	4494783	8	1	SUMF1
chr3	4508609	4509016	19	8	SUMF1
chr3	43731554	43731744	3	1	ABHD5
chr3	43731822	43732252	18	3	ABHD5
chr3	43732311	43732581	21	9	ABHD5
chr3	43732698	43733051	8	4	ABHD5
chr3	43740717	43741287	13	4	ABHD5
chr3	43743353	43743550	4	1	ABHD5
chr3	43743656	43744129	16	2	ABHD5
chr3	43753148	43753406	8	1	ABHD5
chr3	43756388	43756600	4	1	ABHD5
chr3	43759109	43759399	5	0	ABHD5
chr3	43759884	43764267	115	21	ABHD5
chr3	43775491	43775913	19	2	ABHD5
chr3	190023439	190026278	85	28	CLDN1
chr3	190027907	190028092	5	1	CLDN1
chr3	190030610	190031057	21	4	CLDN1
chr3	190039722	190040314	22	10	CLDN1
chr5	147405195	147405399	6	2	SPINK5
chr5	147443375	147443712	14	4	SPINK5
chr5	147444859	147445088	9	1	SPINK5
chr5	147449835	147450063	6	2	SPINK5
chr5	147451660	147451833	4	1	SPINK5
chr5	147465917	147466145	7	0	SPINK5
chr5	147468054	147468218	3	0	SPINK5
chr5	147468531	147468706	3	1	SPINK5
chr5	147468729	147468885	2	0	SPINK5
chr5	147469006	147469234	8	4	SPINK5
chr5	147470165	147470313	4	0	SPINK5
chr5	147470440	147470658	6	2	SPINK5
chr5	147470677	147470841	5	1	SPINK5
chr5	147473866	147474094	10	5	SPINK5
chr5	147475330	147475518	5	0	SPINK5
chr5	147477379	147477616	6	2	SPINK5
chr5	147478746	147478928	5	0	SPINK5
chr5	147479966	147480194	10	2	SPINK5
chr5	147480867	147481049	9	1	SPINK5
chr5	147481293	147481521	11	4	SPINK5
chr5	147484464	147484613	7	4	SPINK5
chr5	147486549	147486777	12	3	SPINK5
chr5	147488265	147488450	3	1	SPINK5
chr5	147491280	147491508	8	3	SPINK5
chr5	147492380	147492547	6	1	SPINK5
chr5	147493874	147494102	8	0	SPINK5
chr5	147495882	147496079	8	3	SPINK5
chr5	147497949	147498177	6	2	SPINK5
chr5	147498498	147498671	8	4	SPINK5
chr5	147499521	147499749	9	3	SPINK5
chr5	147499807	147500004	6	0	SPINK5
chr5	147503345	147503573	6	2	SPINK5

chr5	147504277	147504553	11	5	SPINK5
chr5	147505036	147505226	7	1	SPINK5
chr5	147505235	147505463	7	2	SPINK5
chr5	147506495	147506692	5	1	SPINK5
chr5	147510771	147511002	7	0	SPINK5
chr5	147513309	147513500	6	3	SPINK5
chr5	147516495	147516975	14	4	SPINK5
chr5	156886976	156887637	23	9	NIPAL4
chr5	156890051	156890391	15	4	NIPAL4
chr5	156894006	156894163	5	3	NIPAL4
chr5	156894214	156895026	22	9	NIPAL4
chr5	156895679	156895870	10	3	NIPAL4
chr5	156898614	156898875	8	1	NIPAL4
chr5	156899289	156901780	65	17	NIPAL4
chr6	36210894	36211088	4	2	PNPLA1
chr6	36238186	36238491	13	1	PNPLA1
chr6	36259046	36259382	19	10	PNPLA1
chr6	36260787	36260953	11	3	PNPLA1
chr6	36261889	36262226	11	3	PNPLA1
chr6	36263090	36263251	6	4	PNPLA1
chr6	36269587	36270296	33	8	PNPLA1
chr6	36274018	36274203	7	3	PNPLA1
chr6	36275313	36276422	37	19	PNPLA1
chr6	137143651	137143983	10	6	PEX7
chr6	137146301	137146459	2	1	PEX7
chr6	137147406	137147657	8	2	PEX7
chr6	137151094	137151448	6	4	PEX7
chr6	137166702	137166880	3	2	PEX7
chr6	137167160	137167369	4	1	PEX7
chr6	137187714	137187921	4	1	PEX7
chr6	137190977	137191191	5	2	PEX7
chr6	137191819	137192027	3	1	PEX7
chr6	137193285	137193441	2	2	PEX7
chr6	137219229	137219429	5	2	PEX7
chr6	137234545	137235122	17	6	PEX7
chr6	158589328	158589477	15	3	GTF2H5
chr6	158591451	158591620	5	1	GTF2H5
chr6	158612958	158620426	228	63	GTF2H5
chr7	40172291	40172908	13	4	MPLKIP
chr7	40173777	40174308	15	4	MPLKIP
chr7	100797627	100797983	21	9	AP1S1
chr7	100799824	100800103	6	3	AP1S1
chr7	100800607	100800816	7	2	AP1S1
chr7	100802289	100802527	9	3	AP1S1
chr7	100803749	100804608	27	8	AP1S1
chr7	100804722	100804927	5	3	AP1S1
chr9	131102788	131103167	13	5	SLC27A4
chr9	131105355	131105622	8	1	SLC27A4
chr9	131107383	131107878	19	8	SLC27A4
chr9	131110773	131111032	6	3	SLC27A4
chr9	131112540	131112710	7	3	SLC27A4
chr9	131112712	131112904	6	1	SLC27A4
chr9	131114866	131115076	4	1	SLC27A4

chr9	131115253	131115563	9	7	SLC27A4
chr9	131115643	131115870	6	0	SLC27A4
chr9	131117281	131117519	3	1	SLC27A4
chr9	131117626	131118125	19	5	SLC27A4
chr9	131122562	131123799	36	14	SLC27A4
chr10	13319745	13320404	17	5	PHYH
chr10	13322925	13323160	8	1	PHYH
chr10	13325639	13325889	7	2	PHYH
chr10	13330309	13330591	13	3	PHYH
chr10	13333410	13333962	18	10	PHYH
chr10	13336377	13337037	27	8	PHYH
chr10	13337177	13337656	15	4	PHYH
chr10	13340136	13340295	8	4	PHYH
chr10	13341369	13341813	21	8	PHYH
chr10	13341917	13342180	6	3	PHYH
chr10	13343935	13344462	13	5	PHYH
chr10	90519901	90520057	5	2	LIPN
chr10	90521104	90521320	1	0	LIPN
chr10	90521894	90522112	5	1	LIPN
chr10	90524116	90524415	8	3	LIPN
chr10	90525975	90526185	3	1	LIPN
chr10	90528498	90528735	11	5	LIPN
chr10	90530551	90530798	9	4	LIPN
chr10	90534179	90534351	2	2	LIPN
chr10	90534798	90534970	7	4	LIPN
chr10	90537715	90538049	14	7	LIPN
chr11	130029406	130030139	18	7	ST14
chr11	130057958	130058218	11	4	ST14
chr11	130058374	130058602	9	8	ST14
chr11	130058713	130058884	7	2	ST14
chr11	130059169	130059841	27	12	ST14
chr11	130059885	130060639	32	11	ST14
chr11	130063993	130064233	10	3	ST14
chr11	130064484	130064682	10	4	ST14
chr11	130066183	130066393	11	3	ST14
chr11	130066414	130066739	12	3	ST14
chr11	130067685	130067890	12	5	ST14
chr11	130068152	130068566	24	9	ST14
chr11	130068791	130069014	11	3	ST14
chr11	130069795	130070082	8	2	ST14
chr11	130078254	130078629	12	3	ST14
chr11	130079286	130080406	35	13	ST14
chr12	53038291	53039403	47	18	KRT2
chr12	53040473	53040794	13	3	KRT2
chr12	53041463	53041689	7	2	KRT2
chr12	53041906	53042171	12	4	KRT2
chr12	53042740	53042936	11	4	KRT2
chr12	53043647	53043808	6	2	KRT2
chr12	53044072	53044506	12	1	KRT2
chr12	53045291	53046009	32	13	KRT2
chr12	53068469	53069578	48	12	KRT1
chr12	53070008	53070329	14	4	KRT1
chr12	53070792	53071018	5	2	KRT1

chr12	53071049	53071351	9	2	KRT1
chr12	53071383	53071579	4	1	KRT1
chr12	53071896	53072057	5	0	KRT1
chr12	53072275	53072590	6	2	KRT1
chr12	53073491	53074241	32	13	KRT1
chr13	20761553	20763969	99	32	GJB2
chr13	20766871	20767164	6	5	GJB2
chr13	20796050	20797684	56	17	GJB6
chr13	20803668	20803938	8	3	GJB6
chr13	20804786	20805422	21	9	GJB6
chr13	20805470	20805694	4	2	GJB6
chr13	20806282	20806584	6	4	GJB6
chr13	29233090	29233374	17	5	POMP
chr13	29233908	29234106	6	3	POMP
chr13	29236496	29236694	5	1	POMP
chr13	29238595	29238756	1	0	POMP
chr13	29242559	29242761	6	1	POMP
chr13	29246425	29246619	5	0	POMP
chr13	29252121	29253143	26	4	POMP
chr14	24718269	24718797	13	7	TGM1
chr14	24723278	24723544	11	3	TGM1
chr14	24723819	24724080	9	6	TGM1
chr14	24724127	24724509	13	3	TGM1
chr14	24724519	24724773	12	5	TGM1
chr14	24725144	24725333	4	0	TGM1
chr14	24727440	24727644	4	1	TGM1
chr14	24727690	24727929	9	4	TGM1
chr14	24728230	24728505	12	5	TGM1
chr14	24728859	24729067	10	3	TGM1
chr14	24729095	24729414	13	7	TGM1
chr14	24729605	24729954	18	1	TGM1
chr14	24730850	24731139	21	10	TGM1
chr14	24731189	24731610	28	12	TGM1
chr14	24732244	24732796	24	10	TGM1
chr14	24733089	24733688	15	6	TGM1
chr15	91541595	91542334	27	8	VPS33B
chr15	91542510	91543073	20	4	VPS33B
chr15	91543079	91543255	3	2	VPS33B
chr15	91543669	91544285	16	8	VPS33B
chr15	91544568	91544742	1	1	VPS33B
chr15	91545229	91545462	8	2	VPS33B
chr15	91546264	91546411	3	1	VPS33B
chr15	91548056	91548211	5	1	VPS33B
chr15	91548234	91548399	6	0	VPS33B
chr15	91548559	91548734	6	4	VPS33B
chr15	91548873	91549064	7	2	VPS33B
chr15	91549152	91549339	7	2	VPS33B
chr15	91549551	91550326	28	10	VPS33B
chr15	91550648	91550853	6	1	VPS33B
chr15	91551049	91551244	6	0	VPS33B
chr15	91552980	91553126	3	0	VPS33B
chr15	91556951	91557151	9	3	VPS33B
chr15	91557563	91557713	5	3	VPS33B

chr15	91560142	91560344	7	3	VPS33B
chr15	91560984	91561165	5	0	VPS33B
chr15	91561197	91561316	2	1	VPS33B
chr15	91565333	91565883	20	7	VPS33B
chr15	100940549	100943120	93	29	CERS3
chr15	100996047	100996301	11	7	CERS3
chr15	101009532	101009739	7	2	CERS3
chr15	101013078	101013307	11	5	CERS3
chr15	101015991	101016433	12	3	CERS3
chr15	101019582	101019751	4	1	CERS3
chr15	101020143	101020301	0	0	CERS3
chr15	101024704	101024923	10	2	CERS3
chr15	101030926	101031186	8	5	CERS3
chr15	101040402	101040759	10	3	CERS3
chr15	101041831	101042105	16	4	CERS3
chr15	101043864	101044103	10	4	CERS3
chr15	101061821	101062011	2	1	CERS3
chr15	101068967	101069520	15	10	CERS3
chr15	101084278	101084668	15	8	CERS3
chr15	101084805	101084975	7	2	CERS3
chr15	101085057	101085250	11	3	CERS3
chr17	7975903	7976318	8	5	ALOX12B
chr17	7976415	7976686	5	1	ALOX12B
chr17	7976924	7977125	6	3	ALOX12B
chr17	7978862	7979084	7	5	ALOX12B
chr17	7979442	7979712	11	3	ALOX12B
chr17	7979924	7980111	1	0	ALOX12B
chr17	7980257	7980561	13	6	ALOX12B
chr17	7982663	7982907	6	3	ALOX12B
chr17	7983036	7983463	10	5	ALOX12B
chr17	7983502	7983706	9	1	ALOX12B
chr17	7983925	7984148	5	2	ALOX12B
chr17	7984151	7984344	12	3	ALOX12B
chr17	7984373	7984555	5	2	ALOX12B
chr17	7989283	7989588	13	6	ALOX12B
chr17	7990563	7991072	20	8	ALOX12B
chr17	7999167	8000174	40	14	ALOXE3
chr17	8006590	8006883	10	2	ALOXE3
chr17	8007382	8007583	4	2	ALOXE3
chr17	8011735	8011957	7	0	ALOXE3
chr17	8012441	8012711	9	4	ALOXE3
chr17	8013183	8013896	23	4	ALOXE3
chr17	8014626	8014899	8	1	ALOXE3
chr17	8015360	8015564	4	1	ALOXE3
chr17	8017751	8017977	15	3	ALOXE3
chr17	8018205	8018425	7	3	ALOXE3
chr17	8018874	8019056	3	3	ALOXE3
chr17	8020043	8020348	13	3	ALOXE3
chr17	8021111	8021910	17	9	ALOXE3
chr17	8021963	8022415	19	7	ALOXE3
chr17	19551398	19551628	5	3	ALDH3A2
chr17	19551788	19552487	28	10	ALDH3A2
chr17	19554809	19555141	8	0	ALDH3A2

chr17	19555809	19556060	8	1	ALDH3A2
chr17	19558543	19558750	3	1	ALDH3A2
chr17	19559407	19559937	17	4	ALDH3A2
chr17	19560983	19561225	4	1	ALDH3A2
chr17	19562835	19563062	8	6	ALDH3A2
chr17	19564389	19564805	10	2	ALDH3A2
chr17	19566595	19566865	5	2	ALDH3A2
chr17	19568210	19568410	8	2	ALDH3A2
chr17	19574983	19575319	6	1	ALDH3A2
chr17	19575614	19575794	3	3	ALDH3A2
chr17	19576413	19576638	6	0	ALDH3A2
chr17	19577346	19580961	81	20	ALDH3A2
chr17	38974318	38974784	14	6	KRT10
chr17	38974988	38975463	15	6	KRT10
chr17	38975718	38976093	6	2	KRT10
chr17	38976250	38976969	15	3	KRT10
chr17	38977236	38977419	4	0	KRT10
chr17	38978160	38978913	28	9	KRT10
chr19	15619285	15619444	4	3	CYP4F22
chr19	15634453	15634660	4	2	CYP4F22
chr19	15636093	15636419	19	9	CYP4F22
chr19	15640469	15640714	9	2	CYP4F22
chr19	15648121	15648275	7	3	CYP4F22
chr19	15648295	15648523	8	4	CYP4F22
chr19	15648632	15648854	11	4	CYP4F22
chr19	15651210	15651578	24	8	CYP4F22
chr19	15654731	15654898	5	1	CYP4F22
chr19	15654910	15655140	2	0	CYP4F22
chr19	15658868	15659102	10	3	CYP4F22
chr19	15659898	15660063	5	2	CYP4F22
chr19	15661434	15661617	2	2	CYP4F22
chr19	15662054	15663178	33	15	CYP4F22
chr19	45854195	45855029	64	21	ERCC2
chr19	45855416	45855660	19	5	ERCC2
chr19	45855713	45856124	24	4	ERCC2
chr19	45856290	45856642	20	6	ERCC2
chr19	45857937	45858159	10	2	ERCC2
chr19	45858872	45859036	5	1	ERCC2
chr19	45860477	45860679	8	1	ERCC2
chr19	45860681	45861007	11	2	ERCC2
chr19	45861972	45862220	16	5	ERCC2
chr19	45864731	45864950	9	3	ERCC2
chr19	45866950	45867427	19	4	ERCC2
chr19	45867442	45867855	19	7	ERCC2
chr19	45868045	45868466	14	5	ERCC2
chr19	45871837	45872051	9	1	ERCC2
chr19	45872137	45872455	8	2	ERCC2
chr19	45873340	45873926	20	5	ERCC2
chr22	21213220	21213685	26	7	SNAP29
chr22	21213720	21213978	6	2	SNAP29
chr22	21224574	21225379	21	7	SNAP29
chr22	21235286	21235472	5	2	SNAP29
chr22	21237708	21237907	3	0	SNAP29

chr22	21241916	21245552	132	38	SNAP29
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