

1 **Supplemental table 1. Description of the 118 SNPs included in the genetic analysis**

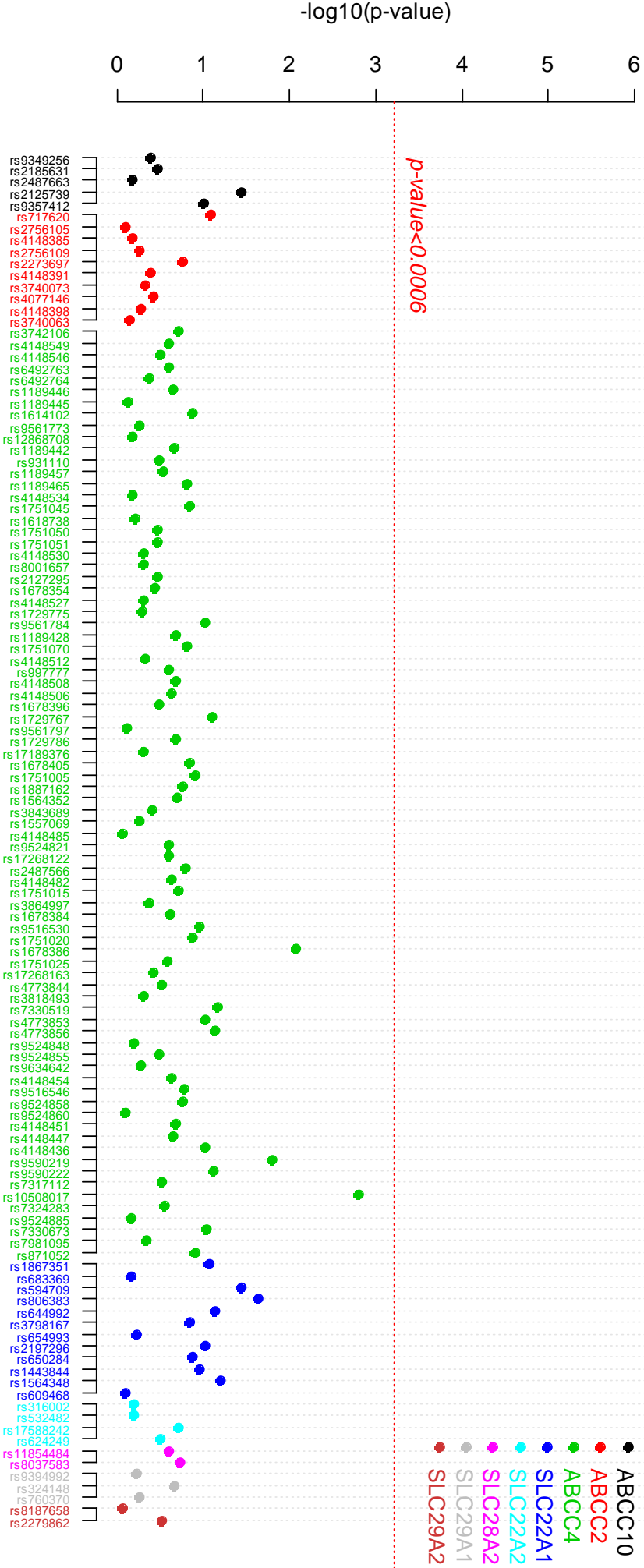
SNP	GENE	A0	A1	CHR	MAF	A0A0 (n)	A0A1 (n)	A1A1 (n)
rs2125739	ABCC10	C	T	6	0.2764	11	45	66
rs9357412	ABCC10	C	G	6	0.3618	16	56	50
rs2185631	ABCC10	G	A	6	0.3537	12	63	47
rs9349256	ABCC10	A	G	6	0.3252	8	64	50
rs2487663	ABCC10	A	G	6	0.2886	8	54	60
rs717620	ABCC2	A	G	10	0.1504	4	29	89
rs2273697	ABCC2	A	G	10	0.2008	9	31	81
rs4077146	ABCC2	A	G	10	0.3025	14	43	61
rs4148391	ABCC2	A	T	10	0.1382	4	26	92
rs3740073	ABCC2	A	G	10	0.3008	11	51	60
rs4148398	ABCC2	A	G	10	0.2846	11	47	64
rs2756109	ABCC2	T	G	10	0.4959	34	53	35
rs4148385	ABCC2	A	C	10	0.3821	17	59	46
rs3740063	ABCC2	C	T	10	0.3943	19	58	45
rs2756105	ABCC2	T	C	10	0.3648	16	56	49
rs10508017	ABCC4	T	C	13	0.4431	26	56	40
rs1678386	ABCC4	C	A	13	0.3252	14	51	57
rs9590219	ABCC4	C	A	13	0.187	3	40	79
rs7330519	ABCC4	C	T	13	0.3525	17	50	54
rs4773856	ABCC4	A	G	13	0.2746	7	53	61
rs9590222	ABCC4	G	A	13	0.2561	8	47	67
rs1729767	ABCC4	C	T	13	0.3699	13	63	46
rs7330673	ABCC4	G	T	13	0.2033	6	37	79
rs4148436	ABCC4	C	T	13	0.4187	19	63	40
rs4773853	ABCC4	G	A	13	0.1992	3	43	76

rs9561784	ABCC4	G	A	13	0.2154	6	41	75
rs9516530	ABCC4	T	C	13	0.3699	16	58	48
rs871052	ABCC4	C	T	13	0.4221	23	55	43
rs1751005	ABCC4	T	C	13	0.1992	2	45	75
rs1751020	ABCC4	A	C	13	0.2602	6	51	65
rs1614102	ABCC4	G	A	13	0.4675	23	69	30
rs1678405	ABCC4	C	T	13	0.4549	24	61	36
rs1751045	ABCC4	A	G	13	0.2927	10	51	61
rs1189465	ABCC4	C	T	13	0.378	16	61	45
rs1751070	ABCC4	G	C	13	0.378	19	54	49
rs2487566	ABCC4	G	A	13	0.4797	28	61	33
rs9516546	ABCC4	T	C	13	0.1626	1	38	83
rs1887162	ABCC4	T	G	13	0.1992	3	43	76
rs9524858	ABCC4	G	A	13	0.2439	4	52	66
rs1751015	ABCC4	C	T	13	0.3659	14	61	47
rs3742106	ABCC4	C	A	13	0.3537	16	54	52
rs1564352	ABCC4	T	G	13	0.4187	21	60	41
rs4148508	ABCC4	T	A	13	0.4146	20	60	42
rs1189428	ABCC4	G	A	13	0.4675	22	71	29
rs4148451	ABCC4	G	C	13	0.4431	22	65	35
rs1729786	ABCC4	A	G	13	0.3415	15	54	53
rs1189442	ABCC4	T	C	13	0.2602	8	47	67
rs4148447	ABCC4	T	A	13	0.4146	22	56	44
rs1189446	ABCC4	T	C	13	0.2033	5	40	77
rs4148482	ABCC4	A	G	13	0.3537	14	58	50
rs4148454	ABCC4	G	A	13	0.1803	5	34	82
rs4148506	ABCC4	G	A	13	0.4106	20	59	43

rs1678384	ABCC4	A	G	13	0.378	12	69	41
rs4148549	ABCC4	A	G	13	0.3984	18	61	43
rs9524821	ABCC4	A	G	13	0.2927	8	56	58
rs17268122	ABCC4	T	G	13	0.1463	0	36	86
rs997777	ABCC4	A	T	13	0.4268	21	61	40
rs6492763	ABCC4	C	T	13	0.4959	34	52	36
rs1751025	ABCC4	G	C	13	0.3443	12	59	50
rs7324283	ABCC4	C	A	13	0.3374	15	52	55
rs1189457	ABCC4	G	C	13	0.4675	21	71	30
rs7317112	ABCC4	G	A	13	0.3049	12	50	60
rs4773844	ABCC4	T	C	13	0.1951	5	38	79
rs4148546	ABCC4	C	T	13	0.4797	34	48	40
rs931110	ABCC4	A	G	13	0.3902	20	56	46
rs9524855	ABCC4	G	A	13	0.1463	0	36	86
rs1678396	ABCC4	C	T	13	0.4715	27	60	35
rs1751050	ABCC4	G	C	13	0.3699	15	60	47
rs1751051	ABCC4	A	T	13	0.3699	15	60	47
rs2127295	ABCC4	A	G	13	0.4146	17	68	37
rs1678354	ABCC4	G	C	13	0.4268	25	53	44
rs17268163	ABCC4	T	C	13	0.1545	0	38	84
rs3843689	ABCC4	G	A	13	0.4431	26	56	40
rs3864997	ABCC4	T	G	13	0.4959	26	69	27
rs6492764	ABCC4	A	C	13	0.418	23	54	44
rs7981095	ABCC4	T	A	13	0.252	8	45	69
rs4148512	ABCC4	T	C	13	0.2724	9	47	66
rs8001657	ABCC4	T	C	13	0.2172	6	40	75
rs4148530	ABCC4	A	G	13	0.3211	12	54	56

rs4148527	ABCC4	T	C	13	0.2154	6	40	76
rs17189376	ABCC4	C	T	13	0.1423	2	31	89
rs3818493	ABCC4	G	A	13	0.3636	14	59	47
rs1729775	ABCC4	A	G	13	0.4675	23	67	32
rs9634642	ABCC4	T	C	13	0.3943	20	57	45
rs9561773	ABCC4	T	C	13	0.3811	14	63	44
rs1557069	ABCC4	G	A	13	0.2236	6	42	74
rs1618738	ABCC4	T	C	13	0.3211	11	56	55
rs9524848	ABCC4	T	A	13	0.3049	11	53	58
rs4148534	ABCC4	G	A	13	0.2236	2	50	70
rs12868708	ABCC4	A	G	13	0.2642	7	50	65
rs9524885	ABCC4	T	C	13	0.3374	15	52	55
rs1189445	ABCC4	G	A	13	0.4187	21	60	41
rs9561797	ABCC4	G	A	13	0.3252	13	54	55
rs9524860	ABCC4	G	T	13	0.3577	13	62	47
rs4148485	ABCC4	T	C	13	0.3537	13	60	49
rs806383	SLC22A1	T	C	6	0.2561	10	43	69
rs594709	SLC22A1	G	A	6	0.435	26	54	42
rs1564348	SLC22A1	G	A	6	0.126	1	29	92
rs644992	SLC22A1	A	C	6	0.3984	16	65	41
rs1867351	SLC22A1	G	A	6	0.2114	2	48	72
rs2197296	SLC22A1	T	C	6	0.3049	14	47	61
rs1443844	SLC22A1	G	A	6	0.4472	29	52	41
rs650284	SLC22A1	C	A	6	0.3415	18	47	57
rs3798167	SLC22A1	A	C	6	0.1992	7	35	80
rs654993	SLC22A1	T	C	6	0.5	26	70	26
rs683369	SLC22A1	G	C	6	0.248	5	50	67

rs609468	SLC22A1	A	G	6	0.2358	6	45	71
rs17588242	SLC22A2	C	T	6	0.2764	7	53	62
rs624249	SLC22A2	A	C	6	0.3984	18	61	43
rs316002	SLC22A2	T	C	6	0.1585	3	33	86
rs532482	SLC22A2	C	G	6	0.2459	10	40	71
rs8037583	SLC28A2	T	C	15	0.3699	15	60	47
rs11854484	SLC28A2	C	T	15	0.3821	16	61	45
rs324148	SLC29A1	T	C	6	0.248	9	42	71
rs760370	SLC29A1	G	A	6	0.3699	16	59	47
rs9394992	SLC29A1	T	C	6	0.2967	9	54	59
rs2279862	SLC29A2	C	T	11	0.3659	16	56	50
rs8187658	SLC29A2	A	G	11	0.1992	2	44	76



Supplemental figure 1. Association between kel1 and the 118 SNPs included in the genetic analysis. For each SNP, the p-value used was the most significant between the 3 models (additive, recessive or dominant).