

Supplementary Table 1. Instrumental variants for genetically predicted sunburn susceptibility.

exposure	SNP	chr	pos	effect_allele	other_allele	effect_allele_frequency	beta	se	p_value	Variation_type	minor_allele_frequency	F_statistic
Sunburns	rs10962612	9	16804167	G	T	0.761	0.0144	0.00136	6.3E-26	SNP	0.239	112.11
Sunburns	rs11070811	15	31394082	T	C	0.183	-0.00882	0.0015	5.1E-09	SNP	0.183	34.57
Sunburns	rs11104733	12	88490119	T	C	0.0147	0.0289	0.00484	2.4E-09	SNP	0.0147	35.65
Sunburns	rs111391498	4	1341553	G	A	0.0481	-0.0273	0.00272	6.9E-24	SNP	0.0481	100.74
Sunburns	rs11198112	10	119564143	T	C	0.165	-0.0168	0.00159	2.3E-26	SNP	0.165	111.64
Sunburns	rs112089506	16	90149171	T	C	0.0813	-0.0313	0.00218	2E-47	SNP	0.0813	206.15
Sunburns	rs11242899	6	460302	A	G	0.266	-0.0121	0.00132	1.1E-19	SNP	0.266	84.03
Sunburns	rs11264244	1	154669067	T	C	0.086	-0.0116	0.0021	0.000000029	SNP	0.086	30.51
Sunburns	rs1126809	11	89017961	A	G	0.303	0.0453	0.00127	1E-200	SNP	0.303	1272.30
Sunburns	rs116125333	5	33930012	G	T	0.0231	-0.0259	0.00393	2.5E-10	SNP	0.0231	43.43
Sunburns	rs11648436	16	14008674	T	C	0.356	-0.0136	0.00121	7.9E-31	SNP	0.356	126.33
Sunburns	rs117132860	7	17134708	A	G	0.0256	0.034	0.00368	6.3E-21	SNP	0.0256	85.36
Sunburns	rs11739906	5	59019359	C	A	0.327	0.0069	0.00124	0.000000027	SNP	0.327	30.96
Sunburns	rs117462393	16	14277804	T	C	0.0144	0.0422	0.0052	5.7E-16	SNP	0.0144	65.86
Sunburns	rs12203592	6	396321	T	C	0.22	0.0891	0.00144	1E-200	SNP	0.22	3828.52
Sunburns	rs12350739	9	16885017	A	G	0.608	0.0184	0.0012	8.3E-55	SNP	0.392	235.11
Sunburns	rs1267037	2	162098155	C	A	0.806	-0.00842	0.00148	0.000000041	SNP	0.194	32.37
Sunburns	rs1278766	13	113534382	C	T	0.546	0.0106	0.00117	2.2E-20	SNP	0.454	82.08
Sunburns	rs12913832	15	28365618	G	A	0.778	0.0348	0.0014	1.5E-138	SNP	0.222	617.88
Sunburns	rs1308048	1	66888542	C	T	0.419	-0.0109	0.00118	1E-19	SNP	0.419	85.33
Sunburns	rs13332673	16	89940386	T	G	0.0101	-0.0507	0.00579	1.2E-18	SNP	0.0101	76.68
Sunburns	rs1338549	6	98312143	G	T	0.533	-0.00755	0.00117	4.4E-11	SNP	0.467	41.64
Sunburns	rs139414522	16	89821155	C	T	0.0153	-0.0396	0.00494	5.3E-16	SNP	0.0153	64.26
Sunburns	rs141817469	16	89927151	T	C	0.0351	-0.051	0.00317	2.5E-58	SNP	0.0351	258.83
Sunburns	rs142314514	16	90130996	G	A	0.0286	-0.0437	0.00382	8E-31	SNP	0.0286	130.87
Sunburns	rs1437635	11	16358722	A	C	0.166	0.0102	0.00157	3.6E-11	SNP	0.166	42.21
Sunburns	rs150527451	11	68817897	A	G	0.107	0.0158	0.0019	2.6E-16	SNP	0.107	69.15
Sunburns	rs1548714	17	26280204	C	A	0.812	0.00866	0.00149	8.8E-09	SNP	0.188	33.78
Sunburns	rs1584885	2	44647038	T	G	0.604	-0.00618	0.00119	0.000000034	SNP	0.396	26.97
Sunburns	rs17232484	16	89861650	A	G	0.0141	0.0331	0.00496	4.3E-12	SNP	0.0141	44.53
Sunburns	rs1805007	16	89986117	T	C	0.101	0.104	0.00191	1E-200	SNP	0.101	2964.83
Sunburns	rs1805008	16	89986144	T	C	0.0869	0.0657	0.00205	1E-200	SNP	0.0869	1027.12
Sunburns	rs2737217	8	116630311	G	A	0.563	-0.0141	0.00118	1.6E-33	SNP	0.437	142.78
Sunburns	rs3213737	12	96379806	A	G	0.576	-0.0173	0.00118	8.5E-50	SNP	0.424	214.95
Sunburns	rs4578351	11	16587580	C	T	0.221	-0.0111	0.00141	2.7E-15	SNP	0.221	61.97
Sunburns	rs4670813	2	38317710	A	G	0.471	-0.00702	0.00117	7.7E-09	SNP	0.471	36.00
Sunburns	rs511515	6	33541507	G	A	0.701	-0.0108	0.00129	3.8E-17	SNP	0.299	70.09
Sunburns	rs56360320	3	189209646	C	A	0.567	-0.0069	0.00117	1.4E-09	SNP	0.433	34.78
Sunburns	rs6007506	22	45622014	T	C	0.337	-0.0133	0.00123	7.1E-27	SNP	0.337	116.92
Sunburns	rs6059655	20	32665748	G	A	0.898	-0.0689	0.00196	1E-200	SNP	0.102	1235.74
Sunburns	rs62423175	6	62195368	A	G	0.176	-0.0102	0.00157	9.5E-11	SNP	0.176	42.21
Sunburns	rs6689641	1	110720400	G	A	0.543	0.00784	0.00117	7.5E-12	SNP	0.457	44.90
Sunburns	rs6882046	5	87968864	G	A	0.267	0.00751	0.00133	0.000000002	SNP	0.267	31.88
Sunburns	rs7034354	9	12732575	G	A	0.858	0.0111	0.00167	1.1E-10	SNP	0.142	44.18
Sunburns	rs7428430	3	50174184	T	C	0.488	0.00667	0.00117	0.000000014	SNP	0.488	32.50
Sunburns	rs75300484	16	89489061	T	C	0.0348	-0.0179	0.00316	0.000000012	SNP	0.0348	32.09
Sunburns	rs75459010	11	88017456	T	C	0.115	0.0106	0.00186	0.000000029	SNP	0.115	32.48
Sunburns	rs7768317	6	41922220	T	C	0.249	-0.00909	0.00135	2.8E-11	SNP	0.249	45.34
Sunburns	rs7794036	7	104870448	C	T	0.53	-0.00778	0.00117	9.1E-11	SNP	0.47	44.22
Sunburns	rs849138	7	28177338	A	G	0.507	0.0077	0.00116	1.9E-10	SNP	0.493	44.06
Sunburns	rs9328259	6	508972	A	C	0.718	0.0135	0.0013	1.8E-25	SNP	0.282	107.84
Sunburns	rs9818780	3	156492758	C	T	0.489	0.00769	0.00117	2.7E-11	SNP	0.489	43.20
Sunburns	rs9858244	3	85787399	A	G	0.214	0.00943	0.00142	4.6E-11	SNP	0.214	44.10
Sunburns	rs9926609	16	3540962	C	A	0.736	-0.00744	0.00132	0.000000025	SNP	0.264	31.77