Molecular Medicine

Supplemental Data

Mouse Model for Protein Tyrosine Phosphatase D (*PTPRD*) Associations with Restless Leg Syndrome or Willis-Ekbom Disease and Addiction: Reduced Expression Alters Locomotion, Sleep Behaviors and Cocaine-Conditioned Place Preference

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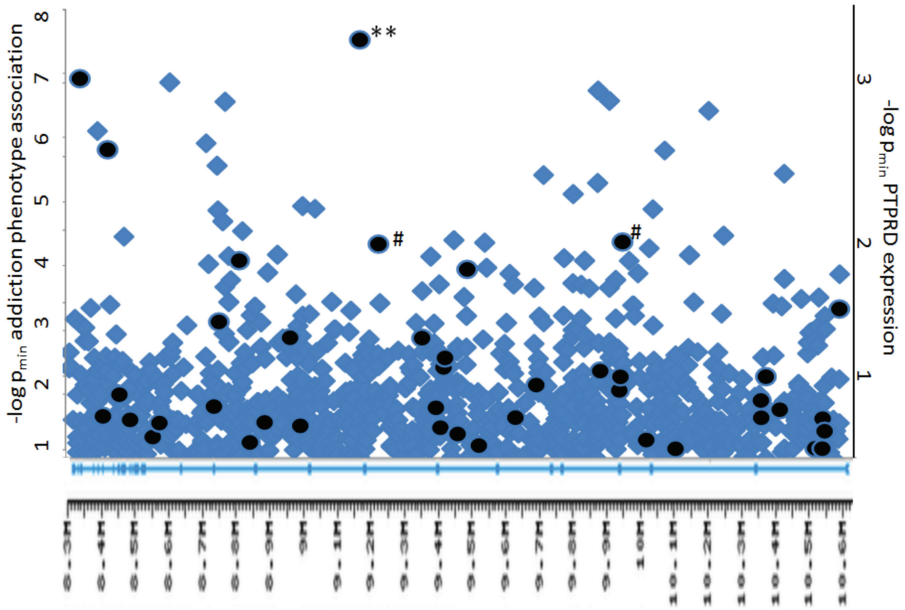

Supplementary Figure S1. Plots of –log p_{min} association with addiction –related phenotypes from samples noted above vs chromosomal distance at PTPRD locus, with PTPRD exons and chromosomal basepairs from Mapviewer (diamonds, left axis) and of –log p values for association with level of PRPRD mRNA expression in human postmortem cerebral cortical samples (filled circles, right axis). #- RLS-associated SNPs. ** SNP with strongest association with PTPRD mRNA expression.

Supplementary Table S1. Data from which pmin association values are obtained.
Columns: rs_id: SNP rs identifier; CHR: chromosome; position: bp (build 37) of SNP; pmin: lowest association p value for this SNP; strand: which chromosomal strand the gene/SNP is located on; allele_a: the defined allele a for Affymetrix genotyping; allele_b: the defined allele b for Arrymetrix genotyping; nidaii_aa_P: p value for association with polysubstance dependence/use v controls with little use and no dependence (Af Am samples) (Drgon *et al.*, 2010); nidaii_aa_Phase: phase of association; nidaii_ea_P: p value for association with polysubstance dependence/use v controls with little use and no dependence (Eu Am samples) (Drgon *et al.*, 2010); nidaii_ea_Phase: phase of association; nida600k_aa_P: p value for association with polysubstance dependence/use v controls with little use and no dependence (Af Am samples) (Liu *et al.*, 2006); nida600k_aa_Phase: phase of association; nida600k_ea_P: p value for association with polysubstance dependence/use v controls with little use and no dependence (Eu Am samples) (Liu *et al.*, 2006); nida600k_ea_Phase: phase of association; jgida_P: : p value for association with methamphetamine dependence v controls with little use and no dependence (Japanese samples) (Uhl *et al.*, 2008); jgida_Phase: phase of association; taiw_P: : p value for association with methamphetamine dependence v controls with little use and no dependence (Taiwanese samples) (Uhl *et al.*, 2008); taiw_Phase: phase of association; hm_dep_P: p value for association with nicotine dependence (FTND) v controls with little use and no dependence (EuAm samples) (Johnson *et al.*, 2009); hm_dep_Phase: phase of dependence; eca_P: p value for association with dependence on at least one addictive substance v controls with no abuse or dependence (EuAm samples) (Johnson *et al.*, 2009); eca_Phase: phase of association; PS_P: p value for association with dependence on any addictive substance v controls with little use and no dependence (EuAm samples) (Uhl *et al.*, 2014); PS_Phase: phase of dependence; BRN_P: p value for association with ability to quit smoking in a randomized controlled clinical trial (EuAm samples) (Uhl *et al.*, 2008); BRN_Phase: phase of association; CNIII_PVAL p value for association with ability to quit smoking in a randomized controlled clinical trial (EuAm samples) (Uhl *et al.*, 2014); CNIII_Phase: phase of association; HM_P: p value for association with ability to quit smoking in the community (former vs current smokers) (EuAm samples) (Johnson *et al.*, 2007); HM_Phase: phase of association; LER_P p value for association with ability to quit smoking in a randomized controlled clinical trial (EuAm samples) (Uhl *et al.*, 2008); Lerman_Phase: phase of association; PIP_P: p value for association with ability to quit smoking in a clinical setting (UK samples) (Uhl *et al.*, 2010); PIP_Phase: phase of association; R1_P: p value for association with ability to quit smoking in a randomized controlled clinical trial (EuAm samples) (Uhl *et al.*, 2007); rose_phase: phase of association; ROSE2_PVAL: p value for association with ability to quit smoking in a randomized controlled clinical trial (EuAm samples) (Uhl *et al.*, 2010); ROSE2_Phase: phase of association; VEC_P: p value for association with ability to quit smoking in a randomized controlled clinical trial (EuAm samples) (Drgon *et al.*, 2010); VEC_Phase: phase of association; SAGE_EA_COC_pval: p value for association with cocaine dependence v controls with little use and no dependence (Eu Am samples) (Drgon *et al.*, 2010); SAGE_EA_COC_phase: phase of association; SAGE_WH_ALC_pval: p value for association with alcohol dependence v controls with little use and no dependence (EuAm samples) (Drgon *et al.*, 2010); SAGE_WH_ALC_phase: phase of association; SAGE_AA_COC_pval p value for association with cocaine dependence v controls with little use and no dependence (Af Am samples) (Drgon *et al.*, 2010); SAGE_AA_COC_phase: phase of association; SAGE_BL_ALC_pval p value for association with alcohol dependence v controls with little use and no dependence (Af Am samples) (Drgon *et al.*, 2010); SAGE_BL_ALC_phase: phase of association; Treut_pval: p value for association with alcohol dependence v controls with little use and no dependence (German samples) (Treutlein *et al.*, 2009, kindly provided by M Reitschul); Treut_phase: phase of association. IlmnStrand: Strand assessed in Immumina assays (SAGE). ACTG: base.

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs7872830	9	8274789	0.003988095	-	A	G	0.966996466	A	0.347611788	A	0.966736473	A	0.217613045	B	0.923834402	A	0.448319119	A	0.873378308	B	0.236939945	A	0.0133	B	0.495982219	A	0.758700013	B	0.758268983	B	0.056355089	B	0.003988095	0.103562452	B	0.818000019	0.863741191	B												
rs7872172	9	8274965	0.002235398																														0.002235398							0.279300004	T	0.3565	T	0.987600029	G	0.594900012	G			Top	(A/C)
rs7868876	9	8275015	0.002235398	+	C	T	0.411054141	B	0.158637548	A													0.392399997	B			0.481599987	B		B							0.335399985		0.160758231	B												
rs7865119	9	8275207	0.081615411	-	A	T					0.549546649	B	0.081615411	A																				0.098910997	A																
rs10976918	9	8279350	0.00374102		A	G					0.872857796	A	0.726695639	A																				0.503146882	B																
rs10976918	9	8279350	0.00374102	+	A	G	0.234949814	A	0.74132444	A					0.39459059	A	0.798840011	B	0.271472002	A	0.009758381	A	0.016759999	B	0.896865646	B	0.739899993	B	0.337970404	B	0.00374102	B	0.317420503			1	0.759292687	B												
rs4084051	9	8280220	0.229111105	+	C	T					0.453681545	A	0.858460192	A	0.608978252	A																									0.374599993	C	0.461899996	C	0.708199978	T	0.466399998	T			BOT	(T/C)
rs3858060	9	8283622	0.106933366	-	A	C	0.881373301	A	0.68912088	B	0.414420288	B	0.717422927	B	0.717771439	A	0.763351133	B	0.700895544	B	0.517505691	B	0.911499977	B	0.670940877	A	0.246800005	B	0.229111105	B	0.311709403	B	0.57037259	0.937633515	B	0.619499981	0.591910422	B												
rs11500309	9	8286344	0.025140001	+	A	C					0.106933366	B	0.367502409	A	0.13221232	A																									0.984300017	A	0.521099985	A	0.988799989	A	0.779999971	C			BOT	(T/G)
rs1392511	9	8287668	0.025140001																																						0.533500016	A	0.196199998	A	0.334100008	A	0.727699995	A	0.025140001	A	Top	(A/G)
rs970346	9	8289797	0.029689999																																						0.572399974	T	0.1285	T	0.239500001	T	0.39320001	T	0.068539999	T	Top	(A/G)
rs970347	9	8289968	0.001452218																																						0.479000002	A	0.147699997	A	0.475199997	A	0.846199989	G	0.029689999	A	Bot	(T/C)
rs12235247	9	8292233	0.000672986	+	G	T	0.472337122	B	0.456683566	B	0.502552627	A	0.032395943	B	0.995603737	B	0.063425177	B	0.261027201	B	0.524566862	B	0.300500006	A	0.001452218	A	0.1285	B	0.777487123	B	0.532921202	B	0.854201067	A	0.748707778	A	0.233600006	0.231956153	B												
rs12235266	9	8292479	0.000672986	-	A	G	0.903835509	B	0.691803059	A	0.560427924	B	0.144555598	A	0.224395291	A	0.101253737	A	0.49167812	A	0.320207345	A	0.356900007	B	0.039326652	B	0.1285	A	0.786486747	B	0.84709215	A	0.000672986	0.236906348	B	0.233600006	0.569673527	A												
rs12237779	9	8292580	0.048980001																																						0.503199995	A	0.492700011	A	0.267399997	C	0.048980001	C	0.202299997	A	Bot	(T/G)
rs12352938	9	8295972	0.010198745																																						0.433899999	T	0.638800025	T	0.346100003	C	0.083570004	C	0.141000003	T	Bot	(T/C)
rs3843579	9	8299450	0.010198745	+	C	G	0.65246642	A	0.918453773	B	0.309853085	A	0.059078542	B	0.228465081	A	0.535666134	A	0.759668163	B	0.940932413	A	0.580500007	B	0.154808118	A	0.311199993	B	0.218111484	A	0.010198745	B	0.390957027	A	0.702279576	B	0.364300013	0.849838436	B												
rs16924671	9	8299534	0.046360009	+	A	G	0.564780098	B	0.495926413	A	0.416006421	B	0.368198746	A	0.879079254	B	0.182595266	A	0.519427892	A	0.350348554	B	0.749300003	B	0.046360009	B	0.093269996	A	0.056080046	B	0.281852018	A	0.541004812	0.500704815	B	0.350300014	0.414266827	B												
rs10976937	9	8300171	0.057684921	+	A	G	0.057684921	B	0.2283691	A					0.462576164	B	0.629977977	B	0.384722712	A	0.917702207	A	0.648400009	B	0.121866305	B	0.093269996	A	0.438259956	B	0.363861806	B	0.291592791			0.756500006	0.946267205	A												
rs13439920	9	8300303	0.080872675	-	A	C	0.543155618	B	0.302231814	A													0.426299989	A			0.77700001	B					0.081185091	A		0.654299974	0.562620055	B	0.558600009	T	0.593699992	T	0.6796	G	0.217199996	G	0.360900015	T	Top	(A/C)
rs13440396	9	8300322	0.080872675	+	A	T	0.325509703	B	0.080872675	A													0.426299989	A			0.77700001	B					0.638282831	A		0.654299974	0.338065671	B												
rs10114301	9	8302318	0.028135226																																						0.694400013	T	0.492399991	G	0.150900006	G	0.157900006	G	0.261599988	G	Bot	(T/G)
rs995336	9	8303393	0.028135226	-	A	T					0.028135226	A	0.109341467	B	0.929637386	B																																				
rs12685966	9	8303681	0.040580001																																						0.902400017	T	0.225400001	T	0.040580001	T	0.066840001	T			TOP	(A/G)
rs12337640	9	8304642	0.256306512																																										0.399599999	A	0.426800013	A			TOP	(A/G)
rs996924	9	8308231	0.02654	-	C	T	0.906912658	A	0.892008927	A													0.358399987	B			0.622399986	A					0.938815272	A		0.58160001	0.256306512	B												
rs1353983	9	8308948	0.02654																																						0.845000029	G	0.849799991	G	0.237399995	A	0.841600001	G	0.02654	A	Bot	(T/C)
rs7873084	9	8309806	0.088399999																																						0.740499973	T	0.502300024	T	0.088399999	T	0.221000001	T			BOT	(T/C)
rs3739578	9	8310065	0.004966403																																						0.672800005	T	0.614199996	T	0.757000029	T	0.87559998	T			TOP	(A/G)
rs10733545	9	8310501	0.004966403	-	C	G	0.593684198	A	0.908948917	B	0.17805366	A	0.015177007	A	0.184309685	B	0.85575555	B	0.106254947	A	0.323517442	B	0.007006	A	0.432495022	B	0.680100024	B	0.109996165	A	0.399826384	A	0.004966403	A	0.972058143	B	0.574699998	0.796056313	B												
rs12005932	9	8310778	0.000816544	+	C	T	0.404254113	B	0.151785801	A	0.625852362	B	0.321988659	A	0.514467011	B	0.779254506	A	0.094838087	A	0.327834909	A	0.468600005	A	0.172665015	B	0.275400013	A	0.636118056	B	0.328192615	A	0.339334269	0.909152787	B	0.896700025	0.932396003	A												
rs12001948	9	8310837	0.000816544	+	C	G	0.032538021	A	0.250608024	B	0.031325481	A	0.000816544	B					0.035395428	B	0.959196033	A	0.524600029	B	0.357081222	A	0.289200008	A	0.134646785	B	0.247597464	A	0.13990677	0.243038367	A	1	0.897455272	B												
rs7848626	9	8312288	0.038290002																																						0.280000001	G	0.289200008	G	0.157000005	G	0.57069999	G	0.150299996	G	Top	(A/G)
rs10739155	9	8320652	0.038290002																																						0.682200015	A	0.873199999	C	0.038290002	C	0.091069996	C	0.056060001	A	Top	(A/C)
rs16924674	9	8322204	0.00438262	+	C	G					0.257774211	B	0.662740795	B																				0.642900985	B																
rs16924677	9	8322248	0.000920254	-	C	G	0.611450765	B	0.612827574	B	0.918870675	A	0.882838911	B	0.090408162	B	0.584070354	B	0.138778721	A	0.477079326	B	0.508000016	A	0.107811059	A	0.07858	B	0.00438262	A	0.59281247	B	0.872579153	A	0.576003524	B	0.225999996	0.504531668	A												
rs16927547	9	8322307	0.000920254	-	C	T	0.398126816	A	0.514645465	B	0.006335654	A	0.969004152	A	0.678352216	B	0.378352629	B	0.845148097	A	0.26673446	B	0.07006	A	0.007037748	A	0.886900008	B	0.362563861	B	0.158449779	A	0.000920254	A	0.723399632	A	0.561999977	0.769215334	B	0.659200013	A	0.147	A	0.198400006	A	0.156000003	A	0.376100004	A	Bot	(T/C)
rs7853112	9	8322353	0.118100002	+	A	C					0.151481022	A	0.190329046	B	0.405234196	A																									0.707700014	A	0.951799989	C	0.995800018	C	0.995299995	A			Bot	(T/G)
rs7853112	9	8322353	0.07858	+	A	C	0.961148944	B	0.846353811	A	0.528445392	B	0.194689146	B	0.173647414	A	0.673723598	B	0.627486252	B	0.545324468	A	0.118100002	B	0.951975483	B	0.657700002	B	0.842316827	B	0.177166192	B	0.190711813	0.655317018	B	0.847199976	0.950948671	B	0.707700014	A	0.951799989	C	0.995800018	C	0.995299995	A			Bot	(T/G)
rs7868317	9	8322515	0.00148185	-	C	T	0.169404	A	0.584499303	B													0.953800023	A			0.07858	B		B			0.31757588			0.1787	0.680861804	A												
rs10976964	9	8322726	0	+	C	T	0.319172549	A	0.095777974	B	0.494850485	A	0.00148185	B	0.909903235	A	0.274068354	B	0.941418588	A	0.613389045	A	0.780099988	A	0.479755647	A	0.064620003	B	0.082460809	B	0.578771922	B	0.115219864	0.896724672	B	0.263399988	0.873796328	A												
rs7871988	9	8322875	0	-	A	G	0.209253091	A	0.843073205	A													0.266400009	B			0	A					0.019614267	A		1	0.936157821	A												
rs10815823	9	8323100	0.007224587	+	C	G	0.551262255	A	0.403187625	A	0.109543772	B	0.080702855	A	0.537276282	B	0.414993162	A	0.437841209	A	0.683789444	A	0.02489	A	0.343293863	B	0.211799994	A	0.681058603	B	0.046456049	A	0.007224587	A	0.372781958	A	0.852599978	0.664882485	B												
rs13291255	9	8325540	0.069399998																																						0.888100028	C	0.618499994	T	0.630699992	T	0.864400029	T	0.069399998	C	Bot	(T/C)
rs10976970	9	8326338	0.035214466	+	A	T	0.120833598	B	0.833464816	A													0.1505	B			0.83890003	B		B			0.215490786			1	0.883358999	A												
rs7032880	9	8327939	0.035214466	+	A	G	0.035214466	B	0.936579258	B													0.215599999	B			0.208800003	B		B			0.611873362			0.925899983	0.822483315	B	0.516300023	A	0.805599988	G	0.399899989	G	0.540899992	G	0.089400001	A	Top	(A/G)
rs10976971	9	8328431	0.149499998																																						0.677699983	C	0.958599985	C	0.194900006	T	0.197699994	T	0.652800024	C	Bot	(T/C)
rs3780336	9	8328690	0.029169401																																						0.659200013	A	0.149499998	A	0.163499996	A	0.169	A	0.353899986	A	Top	(A/C)
rs3847286	9	8328878	0.029169401	-	G	T	0.407990931	B	0.477443228	B	0.349782911	A	0.303129559	B	0.843910048	B	0.337106262	B	0.504295807	B	0.839383725	B	0.638199985	A	0.155920496	A	0.07858	B	0.029169401	B	0.349382811	B	0.319327243	0.877172493	B	0.226099998	0.419516368	A	0.591799974	C	0.961499989	C	0.419400007	A	0.482800007	A			Bot	(T/G)
rs3765142	9	8329203	0.034384656	-	A	T	0.608145087	A	0.828396582	A													0.064779997	A			0.252499998	A					0.034384656	A		0.925999999	0.88542255	B												
rs6477292	9	8329606	0.242300004																																						0.752300024	A	0.242300004	A	0.587000012	A	0.806800008	A	0.463499993	C	Bot	(T/G)
rs1392514	9	8330316	0.093439407																																										0.590699971	G	0.445699999	G			TOP	(A/C)
rs1846695	9	8332540	0.093439407	-	A	C					0.357628145	A	0.700132568	A	0.226064724	A	0.336488593	B	0.824896667	B	0.417458022	B			0.439558284	B			0.490784014	A	0.313020095	B		0.093439407	B						0.756900013	T	0.165800005	T	0.536899984	T	0.554099977	T	0.486799985	G	Bot	(T/G)
rs7044926	9	8332592	0.141956982																																										0.287600011	A	0.725300014	A			BOT	(T/C)
rs12349797	9	8333237	0.101534654	+	C	T					0.812901918	A	0.336120751	A																				0.141956982	B																
rs12349797	9	8333237	0.008619902	+	C	T	0.384001834	B	0.936515695	B					0.884152028	A	0.130177451	A	0.866519735	A	0.997602319	A	0.775600016	A	0.101534654	B	0.201199994	A	0.925684784	B	0.949797883	B	0.623760329			0.381399989	0.792299033	B												
rs11999115	9	8333339	0.008619902	+	A	G	0.363384752	B	0.35529019	B													0.8477	A			0.936200023	B					0.008619902	A			0.631495486	B												
rs17559269	9	8333446	0.001508232	+	C	T	0.198420262	A	0.050955553	B	0.724621872	A	0.59037369	A	0.315752192	A	0.066878365	A	0.149641587	B	0.296935024	A	0.884199977	B	0.537475183	A	0.8046	B	0.228087216	A	0.320294627	B	0.785676331	A	0.347558045	B	0.843800008	0.947275815	B												
rs17559283	9	8333488	0.001508232	-	C	T	0.175665072	A	0.001508232	B	0.936618596	A	0.889769151	A	0.145828695	A	0.386600306	A	0.122347923	B	0.072945892	A	0.981999993	A	0.587413591	A	0.850799978	B	0.092553369	A	0.398947323	A	0.444557222	A	0.195160012	B	0.840900004	0.896063765	B												
rs10123620	9	8333827	0.086879998																																										0.086879998	T	0.157700002	T			Bot	(T/C)
rs10976973	9	8334357	0.067149997																																						0.611299992	C	0.805899978	C	0.180899993	T	0.237000004	T			Top	(A/G)
rs10118873	9	8335072	0.067149997																																						0.60769999	A	0.067149997	A	0.436399996	A	0.465499997	A	0.532800019	G	Bot	(T/C)
rs10511491	9	8335923	0.078720003	+	C	T					0.524466436	B	0.135332415	A	0.758140653	B																									0.509800017	T	0.789699972	C	0.315100014	T	0.834800005	T	0.078720003	T	Bot	(T/C)
rs10511492	9	8335959	0.142700002	-	C	T					0.565845487	B	0.249080992	A	0.821383929	B																																				
rs7848705	9	8336265	0.1109																																						0.745199978	G	0.142700002	G	0.419999987	G	0.479699999	G			Bot	(T/G)
rs4742484	9	8336503	0.103100002																																						0.688600004	C	0.1109	C	0.256599993	C	0.205400005	C			Top	(A/G)
rs7857177	9	8338417	0.024726956	+	C	T	0.530061665	A	0.850899884	A													0.103100002	A			0.309899986	A					0.396488089	A		1	0.973533505	A												
rs10815828	9	8338602	0.024046089	+	A	C	0.345203128	B	0.511530244	B	0.947176319	A	0.024726956	B	0.637624852	A	0.38801041	A	0.79146386	B	0.394543008	B	0.211400002	B	0.363305949	A	0.171000004	B	0.906627297	B	0.262025951	B	0.062605873	0.49725554	B	0.926599979	0.699854729	A												
rs12302801	9	8338632	0.024046089	-	C	T	0.289415651	A	0.024046089	A													0.610800028	B			0.793500006	A		B			0.04404806			0.854399979	0.230213697	B												
rs16927608	9	8339805	0.000452734																																						0.416700006	C	0.375	T	0.797200024	C	0.83130002	T			Bot	(T/C)
rs7854145	9	8340753	0.000452734	+	C	G	0.730239902	B	0.005515341	A	0.040154662	A	0.000452734	A	0.683009676	A	0.195756559	A	0.651725462	A	0.518555612	B	0.239299998	A	0.475107387	B	0.345600009	A	0.535094935	B	0.72937938	A	0.2761233384	0.315986251	A	0.568599999	0.467738056	B												
rs10739158	9	8340830	0.01377435	-	C	T	0.198436106	B	0.944340244	B	0.537398856	A	0.01377435	B	0.472527168	A	0.252402326	B	0.977304712	A	0.770671078	A	0.3574	B	0.466416762	A	0.266299993	B	0.055341386	B	0.08102729	B	0.448808176	0.475328798	B	1	0.938580691	A												
rs10739159	9	8341157	0.045310002																																						0.540499985	T	0.496300012	C	0.356000006	T	0.796500027	T	0.067280002	T	Top	(A/G)
rs3847291	9	8341957	0.045310002																																						0.587800026	A	0.234400004	A	0.045310002	A	0.086170003	A	0.238700002	A	Bot	(T/C)
rs7864233	9	8345415	0.049150001																																										0.281800002	C	0.223399997	C			Top	(A/G)
rs7022162	9	8346540	0.049150001	+	C	T	0.355251189	B	0.459876054	A													0.483099997	B			0.721899986	B		B			0.178095085			0.404199988	0.987173343	B	0.974600017	T	0.707599998	T	0.049150001	C	0.088749997	C			TOP	(A/G)
rs12004215	9	8347036	0.086062039	-	A	T	0.086062039	B	0.903696641	B													0.876699984	B			0.936200023	B		B			0.303103374			1	0.477685693	A												

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn	Strand	ACTG
rs1818072	9	8350320	0.14576561	-	A	G					0.14576561	B	0.213063869	B	0.935674943	A																																			
rs1818072	9	8350320	0.332800001	-	A	G	0.827532679	B	0.36067916	B													0.332800001	B			0.715300024	B					0.343804464	A			0.886799991		0.614080662	B												
rs10511493	9	8351136	0.00748298	+	A	T					0.989409879	A	0.812680718	B	0.452248941	B																																			
rs10511493	9	8351136	0.00580524	+	A	T	0.008021785	B	0.579989059	A	0.371511996	B	0.738035034	A	0.833898461	B	0.171853549	B	0.816356635	A	0.193934428	B	0.017659999	A	0.529492891	B	0.734700024	B	0.240905959	B	0.052174714	A	0.00748298	A	0.225155833	A	0.478399992		0.987470818	A												
rs10976994	9	8351332	0.00580524	-	C	G	0.00580524	A	0.195170451	B													0.452600002	A			0.076169998	B			B		0.845728431				0.377799988		0.609196903	A												
rs1500318	9	8351445	0.026635639	+	C	T					0.467858546	B	0.428540618	A	0.680211926	B																																			
rs1500318	9	8351445	0.002731175	+	C	T	0.042160356	B	0.293655063	A	0.600044847	B	0.031295321	A	0.517644296	A	0.156429134	A	0.18605432	A	0.830033963	B	0.616699994	B	0.686458558	A	0.688300014	A	0.048005861	B	0.810362416	A	0.026635639		0.21023024	A	0.89289999		0.632354809	A												
rs12552493	9	8351934	0.002731175	-	A	G	0.273721176	A	0.395771364	B													0.398400009	B			0.320899993	B			B		0.002731175				1		0.809324503	A												
rs10758960	9	8351953	0.004089537	+	A	G					0.345358003	B	0.004089537	B																					0.082536556	B																
rs20513	9	8352155	0.028844727	+	A	G	0.872658203	B	0.555931121	B													0.053649999	B			0.197099999	B			B		0.513283303				0.924600005		0.744598535	B												
rs20514	9	8352230	0	+	G	T	0.398833769	A	0.218981241	B	0.867596391	B	0.849244574	B	0.776443948	B	0.26497355	B	0.99713729	B	0.033199873	A	0.03785	A	0.904996726	A	0.734700024	B	0.177245562	B	0.104500027	A	0.028844727	A	0.165028095	A	0.537199974		0.73153687	B												
rs7852200	9	8352448	0	+	G	T	0.008497254	B	0.188379038	A													0.648699999	A			0		A				0.535490488	A			0.646000028		0.40569912	A												
rs7018576	9	8354144	0.101700001																																						0.943300009	G	0.614400029	G	0.300300002	A	0.450100005	A			Top	(A/G)
rs10125894	9	8356757	0.069399998																																						0.64139998	G	0.787500024	G	0.101700001	T	0.112499997	T	0.564899981	G	Top	(A/C)
rs4742487	9	8357582	0.01874	+	A	T	0.157671712	A	0.269856573	B													0.076930001	B			0.069399998	B			B		0.9710725				0.230499998		0.316053563	B												
rs12554953	9	8358253	0.01874																																						0.863399983	T	0.837800026	T	0.055199999	T	0.01874	T	0.115000002	T	Top	(A/G)
rs10977006	9	8358408	0.053580001																																						0.702099979	G	0.320499986	A	0.053580001	G	0.340900004	G			Bot	(T/C)
rs10977007	9	8358980	0																																						0.530399978	T	0.675499976	T	0.272000015	C	0.621999979	T	0.575100005	C	Top	(A/G)
rs7851520	9	8359122	0	-	C	T	0.045211997	B	0.213558214	B													0.462700009	A			0		A		B		0.787476144				1		0.177400143	A												
rs10758963	9	8359521	0.039270234	-	C	G	0.453499216	B	0.733112213	A													0.712599993	B			0.987100005	A			B		0.888337051				0.608799994		0.520401818	B												
rs10124014	9	8360338	0.01345	+	A	G	0.528292753	B	0.039270234	B	0.352080965	B	0.795025304	A	0.470186297	A	0.748271893	A	0.677587241	B	0.728411075	A	0.610700011	A	0.385207241	A	0.835399985	A	0.187971966	A	0.594210804	B	0.056267134	A	0.634611283	B	1		0.524543226	A												
rs1500323	9	8360763	0.01345																																						0.760599971	G	0.173700005	G	0.01345	A	0.126100004	A	0.01623	A	Bot	(T/C)
rs4742488	9	8361405	7.88493E-07																																						0.507799983	G	0.575600028	G	0.631299973	G	0.309700012	G	0.020889999	T	Top	(A/C)
rs7867463	9	8361434	7.88493E-07	-	C	T					0.156508215	A	7.88E-07	B	0.163727998	A																																			
rs4742490	9	8361609	0.002157																																						0.80400002	T	0.522300005	C	0.1611	T	0.583700001	T	0.002157	T	Bot	(T/C)
rs7871181	9	8362053	0.012480032	+	A	G	0.012480032	A	0.026846907	B	0.549566722	B	0.333960901	B					0.024395018	A	0.116641821	A	0.832000017	B	0.386559285	A	0.289200008	A	0.176994326	B	0.927132968	A	0.10377043		0.36032527	B	1		0.49652667	B												
rs1156294	9	8362480	0.004265902	+	A	G	0.299917089	B	0.936568111	A													0.662400007	B			0.506200016	B			B		0.348939171				0.214300007		0.853607832	B												
rs12335970	9	8362565	0.004265902	-	A	G	0.012550342	B	0.082778506	A													0.73360002	A			0.289200008	B					0.004265902	A			1		0.688553893	B												
rs10977013	9	8363105	0.04843																																						0.370999992	C	0.831900001	C	0.04843	T	0.243599996	T	0.375699997	C	Bot	(T/C)
rs10977014	9	8363250	0.0425	-	C	G	0.901778297	B	0.50408303	B													0.982900024	B			0.448700011	B					0.135083286	A			0.066820003	B	0.678381466	A												
rs6477299	9	8363491	0.038970001																																						0.718100011	G	0.361900002	G	0.738399983	A	0.894900024	G	0.0425	A	Bot	(T/C)
rs7038767	9	8363735	0.035739999																																						0.991299987	T	0.711000025	C	0.844099999	T	0.907199979	C	0.038970001	T	Top	(A/G)
rs12343024	9	8365569	0.035739999																																						0.640000016	T	0.629199982	G	0.035739999	T	0.118600003	T			Top	(A/C)
rs1039336	9	8366287	0.070519999	+	A	G					0.534565076	A	0.478640229	A	0.677747916	B																									0.313899994	G	0.852599978	G	0.258100003	G	0.523699999	G	0.070519999	G	Top	(A/G)
rs1566447	9	8366477	0.104087324	-	A	G					0.111495589	B	0.865126901	B	0.169749815	A																									0.382499993	T	0.409200013	T	0.303200007	C	0.331999987	C	0.756900013	C	Top	(A/G)
rs2291958	9	8366899	0.042569999	+	C	T	0.104087324	B	0.66279502	A													0.744599998	A			0.478199989	A			B		0.201022165				0.758300006		0.560641793	B												
rs1156793	9	8368662	0.00694																																						0.242599994	G	0.68599999	G	0.042569999	G	0.211199999	G	0.115000002	G	Top	(A/G)
rs1392521	9	8369313	0.00694																																						0.773899972	A	0.918099999	A	0.00694	G	0.022089999	G	0.331499994	G	TOP	(A/G)
rs2221184	9	8369359	0.02558854	+	C	T					0.026941521	B	0.044745685	A	0.399091179	A																																			
rs1500325	9	8369838	0.02558854	-	A	G					0.02558854	A	0.385316941	B	0.218762596	A																									0.728600025	T	0.201199994	T	0.188500002	T	0.78460002	T	0.399199992	T	Top	(A/G)
rs991250	9	8370517	0.086920001																																						0.886500001	C	0.91930002	C	0.086920001	T	0.203600004	T	0.425300002	T	Bot	(T/C)
rs7045817	9	8370534	0.010370096																																						0.625999987	C	0.686399996	C	0.556900024	C	0.785300016	C	0.345400006	T	Top	(A/G)
rs10977018	9	8370656	0.010370096	-	C	T	0.459753192	B	0.041881224	A													0.351300001	A			0.458900005	B					0.010370096	A			0.142800003		0.249945021	B												
rs7031533	9	8371851	0.139400005																																						0.139400005	T	0.733399987	T	0.151500002	T	0.47330001	T	0.358799994	T	Bot	(T/C)
rs12375761	9	8372718	0.173199996																																						0.363799989	C	0.826900005	C	0.173199996	C	0.590600014	C	0.662199974	C	Bot	(T/C)
rs1875238	9	8372720	0.06904																																						0.368099988	C	0.255100012	C	0.698300004	C	0.994599998	A	0.239299998	A	Bot	(T/G)
rs1500326	9	8372966	0.06904																																						0.263799995	C	0.788100004	T	0.092179999	C	0.06904	C			BOT	(T/C)
rs1392522	9	8373549	0.035780693								0.412253749	A	0.98253314	A	0.162699578	B																																			
rs7044276	9	8374686	0.035780693	-	C	G	0.035780693	A	0.244251406	A													0.750999987	B			0.289200008	A			B		0.552124693				1		0.640215995	B												
rs4742491	9	8374836	0.06275652																																						0.717100024	T	0.314799994	T	0.425099999	T	0.727999985	G			Top	(A/C)
rs10758969	9	8375811	0.06275652	+	A	G					0.10333643	B	0.266192447	B																					0.062275652	A																
rs10977022	9	8375838	0.090700001																																						0.839999974	T	0.417400003	T	0.224500001	C	0.090700001	C	0.629800022	T	Bot	(T/C)
rs989813	9	8375969	0.01515																																						0.809700012	C	0.783200026	T	0.160300002	C	0.314300001	C			Top	(A/G)
rs989814	9	8376053	0	-	C	T	0.397854446	B	0.079579043	B													0.126699999	B			0.749499977	A			B		0.390677759				0.239500001		0.239069172	A	0.724799991	A	0.363499999	A	0.02826	G	0.01515	G	0.925599992	G	Bot	(T/C)
rs10117844	9	8376260	0	+	A	C	0.107590533	B	0.009688369	A													0.019889999	A			0		B		B		0.170757956				1		0.926994827	B												
rs1909755	9	8377055	0.003265665	-	C	G	0.053821436	A	0.761595078	A	0.630267357	A	0.030358001	A	0.605125495	B	0.364466791	A	0.451451529	B	0.541195322	B	0.079120003	A	0.939980882	B	0.993900001	B	0.292266808	B	0.200963992	A	0.003265665	A	0.007651014	A	0.841000021		0.088158633	B												
rs10815845	9	8377513	0.00365167	-	A	G	0.62821521	A	0.736480858	B	0.591203983	A	0.386926046	A	0.038900295	A	0.834860718	A	0.868930222	B	0.701367968	B	0.695500016	A	0.166315569	B	0.617699981	A	0.683482915	B	0.847852396	B	0.144852377	A	0.833000383	A	0.917900026		0.359073897	B												
rs12348495	9	8377554	0.00365167	-	A	G	0.8085754	A	0.134418715	A													0.0266	B			0.343699992	A					0.00365167	A			1		0.665504409	A												
rs10977023	9	8378220	0.191100001	+	A	G					0.285151541	A	0.628681577	B																					0.861122034	B									0.298700005	G	0.191100001	G			Bot	(T/C)
rs10977024	9	8378274	0.071209997	-	C	G					0.807719693	A	0.265750735	B																					0.384666522	A																
rs904781	9	8380006	0.071209997																																						0.353399992	C	0.749000013	A	0.176499993	C	0.071209997	C	0.747799993	C	Top	(A/C)
rs1500327	9	8380467	0.045139998																																						0.758300006	C	0.68870002	T	0.241799995	C	0.287499994	C	0.726300001	T	Top	(A/G)
rs1500328	9	8380505	0.045139998																																						0.159700006	G	0.751999974	G	0.065159999	G	0.230599999	G	0.045139998	G	Top	(A/G)
rs7041166	9	8382668	0.095849998																																						0.095849998	G	0.918600023	G	0.305700004	G	0.442299992	G			Top	(A/G)
rs10977037	9	8383996	0.068690002	-	A	G	0.223420289	B	0.125589198	A													0.41170001	A			0.952199996	A					0.217203631	A			0.882700026		0.740200714	B	0.148399994	C	0.906099975	T	0.472000003	T	0.803600013	T	0.145199999	C	Bot	(T/C)
rs7851088	9	8385367	0.068690002																																						0.068690002	C	0.654500008	C	0.380199999	A	0.583700001	A	0.69599998	C	Top	(A/C)
rs1021719	9	8385913	0.073990002																																						0.073990002	A	0.312099993	A	0.580799997	A	0.840200007	A			Top	(A/G)
rs1909756	9	8386388	0.035304091	+	A	G	0.419852488	A	0.490328738	A													0.297699988	A			0.969799995	B			B		0.744122569				0.689100027		0.430040881	B												
rs12352293	9	8386417	0.004290751	-	C	T	0.63526457	A	0.676333768	B													0.521899998	B			0.860300005	A			B		0.082062608				0.676699996		0.035304091	B	0.342400014	G	0.04039	G	0.568400025	G	0.980400026	G			Bot	(T/C)
rs10815851	9	8386502	0.004290751	+	A	T	0.534435253	B	0.985226024	B													0.625	B			0.617900014	A			B		0.004290751				0.538999975		0.961702386	A												
rs1500334	9	8386543	0																																						0.3583	G	0.67809999	G	0.406699985	A	0.126100004	A	0.184300005	G	Bot	(T/C)
rs12347647	9	8386744	0	-	A	G	0.82481835	A	0.304862587	B													0.645099998	B			0		B				0.759275803	A			1		0.919220794	B												
rs12376680	9	8387268	0.002579	+	A	G	0.798883619	B	0.726294435	B													0.1061	B			0.998300016	B			B		0.193310851				0.557200015		0.970380705	A												
rs1392524	9	8388021	0.002579																																						0.880299985	C	0.928900003	A	0.002579	A	0.046319999	A	0.144800007	A	Top	(A/C)
rs10124689	9	8389766	0																																						0.674399972	T	0.769699991	C	0.83130002	C	0.699999988	C	0.755200028	C	Top	(A/G)
rs12336314	9	8390117	0	+	G	T	0.933447186	B	0.323834025	A													0.471500009	A			0		A				0.714992735	A			1		0.736228522	B												
rs1021720	9	8390610	0.064620003																																						0.968100011	C	0.455799997	C	0.496899992	A	0.579900026	A	0.881600222	A	Bot	(T/G)
rs7036240	9	8390681	0.03053																																						0.387400001	G	0.839299977	A	0.064620003	G	0.239700005	G	0.543200016	G	Top	(A/G)
rs10815854	9	8391031	0.02627																																						0.03053	C	0.611100018	C	0.944299996	C	0.702600002	T	0.316199988	C	Top	(A/G)
rs12235754	9	8392449	0.02627	+	A	G	0.75272243	A	0.528565273	A													0.02627	A			0.960699976	B			B		0.454750468				0.92750001		0.769933975	A												
rs7876037	9	8393640	0.048099998	-	A	C	0.577991443	A	0.525875535	A	0.299004309	B	0.194646083	A	0.607917258	A	0.153542449	A	0.969018387	A	0.114428322	B	0.048099998	A	0.950865685	A	0.479000002	A	0.092740808	B	0.082950684	A	0.202860705		0.532660765	B	0.647199988		0.547863265	B	0.542500019	G	0.628799975	T	0.787899971	G	0.246299997	G	0.460500002	G	Top	(A/C)
rs7042145	9	8394095	0																																						0.827300012	T	0.510999978	C	0.056940001	T	0.158500001	T	0.174600005	T	Bot	(T/C)
rs12000147	9	8395242	0	+	A	T	0.393546952	B	0.046112279	A													0.972000003	A			0		A				0.022361749	A			1		0.923009717	B												
rs1500336	9	8396003	0.047712015	+	C	T	0.695036331	A	0.152012258	A													0.87620002	A			0.228100002	B			B		0.047712015				0.882700026		0.305010583	B	0.182600007	C	0.705600023	C	0.793600023	C	0.42930001	C	0.379700005	C	Bot	(T/C)
rs17561379	9	8396407	0.007492	+	A	G	0.234391776	B	0.954035049	B	0.234899675	B	0.498466444	B	0.789186047	B	0.935163261	A	0.310425692	B	0.395975568	B	0.301600009	A	0.608002752	A	0.606100023	A	0.874647959	B	0.710749665	A	0.806916584	A	0.600092299	A	0.444499999		0.698855455	B	0.253399998	A	0.400900006	A	0.751900017	G	0.320100009	G	0.234200001	A	Top	(A/G)
rs1875239	9	8397583	0.007492																																						0.920099974	C	0.866999984	C	0.007492	T	0.022120001	T	0.301400006	T	Bot	(T/C)
rs10815855	9	8398453	0.0149																																						0.300199986	T	0.489100009	T	0.903900027	C	0.266900003	C	0.333700001	T	Bot	(T/C)
rs3903826	9	8398803	0.000404034																																						0.424899995	C	0.901199997	C	0.0149	C	0.01729	C	0.184799999	C	Top	(A/G)
rs3847293	9	8399888	0.000404034	+	C	G	0.614648433	B	0.799284963	A													0.439700007	A			0.462199986	B					0.000404034	A			0.213699997		0.550406958	B												
rs7849327	9	8400686	0.064120002																																						0.642799974	A	0.864300013	C	0.064120002	A	0.247299999	A			Bot	(T/G)
rs10977060	9	8400813	0.1184																																						0.244399995	T	0.878199995	T	0.249599993	T	0.392199993	T			Top	(A/G)
rs7856797	9	8401848	0																																						0.609200001	T	0.906799972	T	0.315499991	T	0.655700028	T	0.1184	T	Top	(A/G)
rs10977061	9	8403488	0	+	C	G	0.564386471	B	0.173051649	B	0.598409233	B	0.379828127	B					0.84629347	A	0.18240004	A	0.582599998	B	0.408025049	B	0		A	0.346350258	A	0.172172539	B	0.170853474	A	0.403126898	B	0.214100003		0.594247618	B												
rs10977062	9	8403514	0.131200001	+	C	G	0.673278114	B	0.935412963	A													0.330599994	A			0.606100023	A					0.448499096	A			0.266600013		0.884581928	B												
rs10511494	9	8406196	0.070307937	+	C	T					0.454871399	B	0.211413361	A	0.822820851	B																									0.187199995	T	0.234699994	T	0.64410001	T	0.535099983	C	0.131200001	T	Top	(A/G)
rs10815864	9	8408366	0.070307937	-	A	G					0.62164723	A	0.735586348	A																					0.070307937	B																
rs3901934	9	8410576	0.005220308																																						0.668099999	T	0.999599993	G	0.148200005	T	0.08292	T	0.645600021	T	Bot	(T/G)
rs2296094	9	8410673	0.005220308	+	A	G	0.008463713	B	0.766603469	A	0.232182746	B	0.774804472	B	0.927097937	B	0.593759372	A	0.021025916	A	0.622162667	B	0.075039998	A	0.755286948	A	0.965499997	B	0.005220308	A	0.526774934	A	0.0661088	A	0.552919241	B	0.245000005		0.469061953	B	0.049460001	G	0.179100007	G	0.284700006	A	0.168300003	A	0.050980002	G	Bot	(T/C)
rs2296095	9	8410902	0.048179999																																						0.048179999	A	0.167799994	A	0.384299994	G	0.195899993	G	0.049649499	A	Bot	(T/C)
rs1535673	9	8411207	0.062016437	-	C	T	0.062016437	B	0.871988994	B	0.144875111	B	0.593935797	A					0.900041739	A	0.677192174	B			0.495585474	B	0.257600009	A	0.899312456	A	0.651033789	A	0.426016088	A	0.498703195	A	0.674199998		0.757826735	A												
rs1323580	9	8412302	0.01925																																						0.174099997	C	0.953700006	C	0.2755	C	0.273600012	C	0.289299995	C	Bot	(T/C)
rs10977081	9	8413755	0.009196048																																						0.342400014	C	0.01925	C	0.191200003	C	0.436800003	C	0.198200002	C	Top	(A/G)
rs1359114	9	8413958	0.009196048	-	C	G					0.077563165	B	0.009196048	B	0.356295785	A																																			
rs1535675	9	8415017	0.002696161	+	C	T					0.323435186	A	0.524003887	A																					0.016243649	B																
rs2381796	9	8415122	0.002696161	-	A	G	0.086478573	B	0.567562019	B													0.701300025	A			0.218400002	B					0.002696161	A			0.623399973		0.300141587	A												
rs10977084	9	8415271	0.02108	+	C	T	0.581542036	B	0.738249368	B													0.168500006	B			0.645900011	B					0.062385495	A			0.700500011		0.205053457	A	0.85680002	C	0.613300026	T	0.643800002	T	0.814100027	C			TOP	(A/G)
rs2031214	9	8415422	0.02108	+	A	G	0.803863222	B	0.479739841	A													0.02108	A			0.583599985	B			B		0.557973338				0.369500011		0.847878019	B	0.656799972	G	0.77579999	G	0.172900006	G	0.058060002	G	0.456800014	G	Top	(A/G)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase
rs10977086	9	8416294	0.035633241	-	A	G					0.044365188	B	0.192703022	B		
rs10977089	9	8417170	0	-	A	G	0.239436747	A	0.87830971	B						
rs7853248	9	8417516	0	+	C	G	0.879075397	A	0.123485987	B						
rs12554442	9	8417879	0.07497													
rs10815867	9	8418249	0.034770001	+	C	T	0.983379733	B	0.824376414	A						
rs12348387	9	8418332	0.012026217													
rs7028474	9	8418381	0.012026217	-	C	T	0.579735881	B	0.439560116	A						
rs9792615	9	8418638	0.201852508	+	A	T	0.683079354	A	0.577331573	B						
rs10815869	9	8418671	0.121164969	+	A	G					0.821875044	A	0.646328873	B		
rs10815869	9	8418671	0.02108	+	A	G	0.374492717	A	0.903535915	A					0.600128679	B
rs2031216	9	8418856	0.001170058	-	C	T	0.798164751	B	0.777813706	B	0.947071875	B	0.210548308	B	0.219883569	A
rs7030220	9	8418988	0.001170058	-	A	G	0.910041283	A	0.008867606	B						
rs9792404	9	8419048	0.117544408	-	C	T					0.235801657	A	0.215378368	B		
rs9792404	9	8419048	0.011891854	-	C	T	0.896415349	B	0.457683471	A					0.117544408	A
rs9792633	9	8419119	0.011891854	-	C	T	0.749304688	B	0.706919859	B						
rs4742502	9	8420033	0.023343592													
rs942176	9	8420742	0.023343592	-	C	T	0.481818329	B	0.767582698	A	0.34463783	A	0.482604882	A	0.129523451	B
rs2381798	9	8421163	0.084664349	+	A	G	0.084664349	A	0.51629992	A	0.957490864	B	0.469072439	B	0.741685602	A
rs7866424	9	8422073	0.041334064													
rs16927848	9	8422349	0.041334064	-	A	G	0.041334064	A	0.206794482	B						
rs7023863	9	8422417	0.046710401	-	C	G	0.615876316	A	0.334731611	B						
rs7040015	9	8422653	0.049830001													
rs10977093	9	8422782	0.049830001	-	A	G	0.795304321	B	0.285880359	B						
rs7027686	9	8423022	0.058066132	+	C	T	0.058066132	B	0.058417388	A					0.992495471	A
rs7027702	9	8423045	0.041370001													
rs7027844	9	8423160	0.041370001													
rs2381800	9	8425110	0.046209998													
rs2890794	9	8425525	0.046209998													
rs10758974	9	8425925	0.081129998													
rs10815873	9	8426194	0.009939539													
rs10977103	9	8426963	0.009939539	+	A	G	0.196545515	B	0.367225101	B	0.854596764	A	0.876508241	B	0.079925462	B
rs10977104	9	8427141	0.012749686	+	C	G	0.066292667	A	0.414641941	A	0.778970602	B	0.823216158	B	0.214101933	A
rs10977105	9	8427488	0.003442614	+	C	T	0.281219004	B	0.091747232	B	0.965291158	A	0.572046748	B	0.012749686	B
rs1323584	9	8427902	0.003442614	-	A	C	0.119618134	B	0.202528912	B					0.047154706	B
rs1323585	9	8428004	0.06106	+	C	G	0.25009512	B	0.732062554	B						
rs10977109	9	8431203	0.06106													
rs10815875	9	8431646	0.012699425	-	C	T					0.595101316	A	0.225959572	B		
rs7853571	9	8431863	0.012699425	-	G	T	0.314512872	A	0.246580686	B					0.0269021	A
rs16927880	9	8431993	0.032621812	+	C	G	0.795989837	B	0.731405358	A						
rs7869958	9	8432098	0.032621812	-	A	C	0.825726455	A	0.593692588	B	0.234296451	A	0.314364602	B	0.216782053	A
rs2381802	9	8432164	0													
rs12004152	9	8432594	0	+	C	T	0.146638167	B	0.16794872	A						
rs10977110	9	8435066	0.137799993													
rs10815876	9	8435288	0.166299999													
rs4742504	9	8436752	0.024219999													
rs2890795	9	8437732	0.003021228													
rs1323587	9	8438426	0.003021228	+	C	T	0.136382944	A	0.003021228	B	0.124824477	A	0.951130226	B	0.368523176	B
rs16927892	9	8438775	0.037161694	+	A	G	0.22338217	B	0.172936835	A	0.564765972	B	0.09294039	B	0.064294435	A
rs10815877	9	8440441	0.036477276	+	A	G					0.967600984	A	0.554576707	B		
rs10815877	9	8440441	0.036477276	+	A	G	0.497895841	B	0.682787602	A					0.427176126	A
rs10815878	9	8441191	0.115999997													
rs10977117	9	8441755	3.50484E-05													
rs12375663	9	8442875	3.50484E-05	-	A	G	0.92763835	A	0.327557709	B						
rs10977119	9	8442899	0.234599993													
rs12375674	9	8442953	0.468400002													
rs1323588	9	8443781	0.219500005													
rs7031287	9	8444566	0.141299993													
rs7870456	9	8444921	0		C	T					0.845764089	A	0.581074855	A		
rs1323589	9	8445307	0	-	C	T	0.856408524	A	0.481264796	B						
rs1407971	9	8445855	0.031422773	-	A	T	0.534846425	B	0.299251432	B	0.058273662	A	0.494191733	B	0.384229111	B
rs1323590	9	8445942	0.049096154	-	C	T	0.821380888	B	0.052084402	A	0.970241537	A	0.541292405	A	0.266253357	B
rs7863545	9	8445964	0.040874752	+	C	T	0.918112785	B	0.065092671	B	0.110794608	A	0.897590569	B		
rs1323591	9	8446020	0.011312218	-	A	G					0.543968358	B	0.912000448	B	0.040874752	B
rs1323591	9	8446020	0.010845061	-	A	G	0.3847729	A	0.056363056	A	0.928671041	A	0.959018022	A	0.107308128	B
rs17649066	9	8446219	0.010845061	+	C	G	0.430336036	A	0.306446226	A	0.010845061	A	0.119592576	B		
rs6477310	9	8446247	0.054623043	+	C	T	0.330967291	A	0.054623043	A	0.648018173	B	0.346130537	A	0.811310865	B
rs7024486	9	8447759	0.061680737													
rs10122691	9	8448811	0	-	C	T	0.731550806	A	0.061680737	B	0.880765078	B	0.141301194	B	0.158204392	B
rs10977128	9	8449823	0	+	A	G	0.255157624	A	0.213032781	A						
rs10977129	9	8450149	0.07877503	-	C	T	0.793629614	B	0.736023486	A						
rs2296097	9	8450178	0.07877503	+	A	G	0.27770276	A	0.07877503	A						
rs1407972	9	8451714	0.056126529	+	C	T					0.925352175	B	0.928699467	A	0.088472673	A
rs1407972	9	8451714	0.030272822	+	C	T	0.707190066	A	0.056126529	A						
rs10511495	9	8453245	0.024016901	-	A	G					0.441838002	A	0.030272822	B		
rs2281747	9	8455598	0.008134831	-	C	T	0.799924886	A	0.185529048	B	0.282190063	B	0.355959687	B	0.105601602	B
rs10815880	9	8456133	0.008134831	-	A	C	0.023477625	A	0.008134831	B						
rs10758975	9	8456393	0.020799812	-	A	C	0.278022023	B	0.020799812	A						
rs13301764	9	8457855	0.035648112	-	C	T	0.276450184	A	0.855889973	B					0.720147093	A
rs12340424	9	8458567	0.035648112	-	C	T	0.796787207	B	0.035648112	A						
rs13286656	9	8458780	0.026174407													
rs10511496	9	8459809	0.026174407	+	A	G					0.045930243	B	0.026174407	A	0.544540093	B
rs7862199	9	8460572	0.145825041													
rs1359119	9	8460749	0.145825041	-	C	T					0.145825041	A	0.529572265	B	0.845154797	A
rs1359120	9	8460974	0.046733338													
rs4625085	9	8461288	0	+	A	G	0.278758862	A	0.046733338	B						
rs12337324	9	8461390	0	+	A	G	0.825045273	A	0.039284432	B						
rs7852952	9	8461481	0.208000004													
rs2296099	9	8461501	0.023081621													
rs12346891	9	8461712	0	+	C	T	0.2168608	A	0.025060917	A						
rs10977136	9	8461762	0	-	A	G	0.189691894	A	0.419279517	B						
rs10977138	9	8462038	0.252600014													
rs2381803	9	8463169	0.05494													
rs10977144	9	8464233	0.05494													
rs10977146	9	8465677	0.148900002													
rs13286274	9	8466459	0													
rs12340876	9	8466994	0	-	A	G	0.994777384	B	0.268066939	A	0.949757044	A	0.062869292	A		
rs10977148	9	8467093	0.004573191	-	G	T	0.471602409	B	0.004573191	A	0.631437331	A	0.499642472	A		
rs2381804	9	8468068	0.140599996													
rs767675	9	8469185	0.152899995													
rs10815885	9	8470428	0.107100398													
rs13294270	9	8470519	0.107100398	-	G	T	0.107100398	B	0.457884349	A						
rs10511497	9	8471602	0.055003958	-	C	G					0.484920385	A	0.921121478	B	0.228839164	A
rs10511498	9	8472080	0.055003958	+	C	G					0.861775471	A	0.055003958	A	0.405686695	A
rs10117986	9	8472408	0.01304													
rs17650044	9	8472778	0													
rs10117452	9	8472971	0	-	C	T	0.813625624	A	0.432010193	B	0.555693702	B	0.015265469	B		
rs10977154	9	8473347	0.046179999													

rs_id	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase
rs10977086																				0.249941185	B		
rs10977089							0.215200007	A			0.73269999	A		B			0.035633241				0.631699979	
rs7853248							0.506299973	B			0	A					0.240555701	A			1	
rs12554442																						
rs10815867							0.1087	A			0.517199993	B					0.479203912	A			0.847800016	
rs12348387																						
rs7028474							0.583400011	A			0.815199971	A					0.012026217	A			0.282599986	
rs9792615							0.973200023	B			0.855799973	B					0.201852508	A			0.282599986	
rs10815869																				0.265057598	B		
rs10815869	0.181891007	B	0.627052617	A	0.714953039	B	0.2051	A	0.330887867	A	0.559599996	B	0.343690164	A	0.207512959	A	0.303305779	A			0.126200005	
rs2031216	0.150567832	B	0.637640336	B	0.639275765	B	0.02108	B	0.614815059	B	0.446799994	A	0.684336594	B	0.122300292	B	0.240644774		0.079504441	A	0.244399995	
rs7030220							0.53579998	B			0.855799973	A		B			0.001170058				0.282599986	
rs9792404																				0.705795624	B		
rs9792404	0.149926663	A	0.21802639	A	0.662011804	A	0.497799993	A	0.449393636	A	0.998099983	A	0.859793098	A	0.731975939	A	0.242611981	A			0.308600009	
rs9792633											0.855799973	A		B			0.011891854				0.282599986	
rs4742502																						
rs942176	0.243422	A	0.082304618	A	0.25272607	A	0.05305	A	0.158946811	A	0.388700008	B	0.666117528	A	0.023343592	A	0.533768303	A	0.149658376	B	0.926900029	
rs2381798	0.86710351	B	0.810976194	B	0.397397227	B	0.126000002	B	0.975769693	A	0.575100005	A	0.747324541	B	0.197430974	B	0.70602243		0.124817853	A	0.364100009	
rs7866424																						
rs16927848							0.344500005	A			0.562399983	A		B			0.808150416				0.552900016	
rs7023863							0.800400019	A			0.592999995	A		B			0.231076543				0.650600016	
rs7040015																						
rs10977093							0.049830001	B			0.660899997	A					0.302398399	A			0.689599991	
rs7027686	0.848121376	B	0.750852805	A	0.476197747	A	0.297699988	B	0.381725551	B	0.594200015	B	0.751416333	B	0.595797248	B	0.075479466	A			0.335900009	
rs7027702																						
rs7027844																						
rs2381800																						
rs2890794																						
rs10758974																						
rs10815873																						
rs10977103	0.573861892	B	0.886695226	A	0.553655967	B	0.337099999	A	0.77267966	B	0.948599994	B	0.326124779	B	0.518396761	B	0.009939539	A	0.088142283	A	0.449999988	
rs10977104	0.250622473	A	0.518220613	A	0.295376251	A			0.586152986	A	0.966799974	A	0.256788452	B	0.586826414	A	0.037601254		0.1936504	B	0.847000003	
rs10977105	0.568584949	B	0.251722875	B	0.997360133	A	0.346399993	B	0.571540398	A	0.966799974	B	0.315058354	B	0.299236102	B	0.057482713	A	0.34999969	A	0.838400006	
rs1323584	0.250589289	B	0.20495044	B	0.169570341	B	0.430799991	B	0.589712372	B	0.966799974	B	0.138816364	B	0.060573477	B	0.003442614	A			0.84799999	
rs1323585							0.695599973	B			0.85799998	B		B			0.800126178				0.835900009	
rs10977109																						
rs10815875																				0.685219953	A		
rs7853571	0.86436432	A	0.507825551	A	0.361042611	A	0.995199978	B	0.81842024	A	0.200399995	B	0.230202187	B	0.434413254	A	0.012699425				0.801100016	
rs16927880							0.104900003	A			0.613399983	A		B			0.159706756				0.607200027	
rs7869958	0.919586468	A	0.102281503	B	0.032621812	A	0.124499999	B	0.791905501	A	0.200399995	B	0.207871587	B	0.521561554	A	0.054942253		0.588570248	A	0.898899972	
rs2381802																						
rs12004152							0.90990001	B			0	A					0.173961217	A			1	
rs10977110																						
rs10815876																						
rs4742504																						
rs2890795																						
rs1323587	0.695298443	A	0.449967218	A	0.193900058	A			0.583867156	A	0.103100002	B	0.818250001	B	0.571027531	A	0.844634576		0.285626213	B	0.119999997	
rs16927892	0.876422641	A	0.331451306	A	0.489974023	A	0.172000006	B	0.283884719	B	0.836899996	A	0.909131314	B	0.337633242	B	0.037161694	A	0.553778275	B	0.859799981	
rs10815877																				0.809667761	B		
rs10815877	0.828796205	B	0.955165977	B	0.921230872	A	0.193299994	B	0.940922804	B	0.504400015	B	0.036477276	B	0.082144947	B	0.577944719				0.31130001	
rs10815878																						
rs10977117																						
rs12375663							0.132300004	A			0.939000011	B		B			3.50484E-05				0.596400023	
rs10977119																						
rs12375674																						
rs1323588																						
rs7031287																						
rs7870456																				0.147504564	A		
rs1323589											0	A					0.044679814	A			1	
rs1407971	0.57685314	A	0.812853114	A	0.91793128	B	0.346399993	A	0.031422773	A	0.852500022	B	0.244838574	B	0.263983355	A	0.317928918		0.99481641	B	1	
rs1323590	0.839076054	A	0.237817677	A	0.54208286	A	0.268700004	A	0.621691665	B	0.448700011	B	0.344500272	B	0.720589758	A	0.403671185	A	0.374853919	B	0.906799972	
rs7863545			0.340988887	A	0.442334571	B	0.371300012	B	0.877566497	B	0.179800004	B	0.560091497	B	0.657534284	A	0.766950919	A	0.049096154	A	1	
rs1323591																						
rs1323591	0.966273455	B	0.064695845	B	0.274938242	B	0.09623	A	0.728482033	B	0.606999993	A	0.705221181	B	0.686146373	B	0.982434521	A	0.011312218	B	0.382699996	
rs17649066			0.267681579	A	0.466658552	B			0.205387339	B	0.577899993	B	0.613385889	B	0.233935759	A	0.06200738		0.664052443	B	0.758000016	
rs6477310	0.47651426	B	0.449636418	A	0.520526595	A	0.448100001	A	0.358329307	B	0.703800023	A	0.38550038	A	0.99712667	B	0.441033968	A	0.084203581	B	0.494700015	
rs7024486																						
rs10122691	0.363615269	B	0.951231693	A	0.621536783	A	0.388000011	B	0.415641469	A	0.903100014	B	0.392070427	B	0.682549871	B	0.07410509		0.302414427	A	0.917699993	
rs10977128							0.215000004	B			0	B		B			0.132273414				1	
rs10977129							0.156499997	A			0.099809997	A					0.101645666	A			1	
rs2296097							0.451900005	A			0.843599975	A					0.132830118	A			0.917200029	
rs1407972																						
rs1407972							0.101899996	A			0.655399978	B		B			0.402590273				0.8301	
rs10511495																						
rs2281747	0.433542541	B	0.19679532	A	0.477922069	B	0.680999994	B	0.39536754	A	0.8847	B	0.564023832	B	0.585513432	A	0.122090943		0.024016901	A	0.46450001	
rs10815880							0.890299976	A			0.672100008	A		B			0.025706047				0.184599996	
rs10758975							0.958500028	B			0.75940001	B					0.759895227	A			0.836199999	
rs13301764	0.783873021	B	0.918918836	B	0.981662537	B	0.598699987	A	0.229210506	A	0.622399986	A	0.141641941	B	0.747845788	B	0.203409354				1	
rs12340424							0.603600025	B			0.788699985	B					0.742298278	A			0.9102	
rs13286656																						
rs10511496																						
rs7862199																						
rs1359119																						
rs1359120																						
rs4625085							0.728999972	A			0.289200008	A		B			0.454423766				1	
rs12337324							0.129299998	B			0	B		B			0.030688214				1	
rs7852952																						
rs2296099																						
rs12346891							0.351599991	A			0.620000005	B		B			0.168722842				0.474299997	
rs10977136			0.027483527	A	0.592417899	A	0.140300006	B	0.061472878	A	0	B	0.93743001	B	0.572051968	B	0.061387272				1	
rs10977138																						
rs2381803																						
rs10977144																						
rs10977146																						
rs13286274																						
rs12340876			0.682292138	B	0.16930511	A	0.336199999	A	0.234541349	B	0	A	0.529429651	A	0.030967859	B	0.130239124	A	0.213396186	B	1	
rs10977148			0.647656641	B	0.199400351	B			0.827718443	B	0.419699997	B	0.555961647	B	0.574992906	A	0.01570858		0.081547552	B	0.397000015	
rs2381804																						
rs767675																						
rs10815885																						
rs13294270							0.314900011	A			0.170200005	B		B			0.875864858				0.405299991	
rs10511497																						
rs10511498																						
rs10117986																						
rs17650044																						
rs10117452			0.543052312	A	0.43933982	A	0.060819998	B	0.68677506	A	0	B	0.321182973	B	0.466078259	B	0.15922318		0.635124837	B	1	
rs10977154																						

rs_id	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs10977086														
rs10977089	0.268499078	B												
rs7853248	0.407439905	B												
rs12554442			0.223399997	G	0.768400013	G	0.202099994	G	0.168699995	G	0.07497	G	Bot	(T/G)
rs10815867	0.899121392	B	0.243900001	C	0.279799998	C	0.188500002	T	0.093110003	T	0.420300007	C	Top	(A/G)
rs12348387			0.555499971	C	0.034770001	C	0.390700012	C	0.421000004	C	0.144800007	C	Top	(A/C)
rs7028474	0.86755901	A												
rs9792615	0.945560351	A												
rs10815869														
rs10815869	0.121164969	B												
rs2031216	0.537597623	B												
rs7030220	0.889156219	B												
rs9792404														
rs9792404	0.48197573	B												
rs9792633	0.498533956	B												
rs4742502			0.448000014	T	0.437700003	T	0.038880002	T	0.047680002	T	0.799000025	T	Bot	(T/C)
rs942176	0.248430687	B	0.630599976	A	0.922399998	A	0.451700002	A	0.195899993	A	0.776000023	A	Bot	(T/C)
rs2381798	0.607492671	A	0.477499992	A	0.99879998	G	0.426699996	A	0.252200007	A			TOP	(A/G)
rs7866424			0.999000013	A	0.83130002	G	0.127100006	G	0.575100005	G			BOT	(T/C)
rs16927848	0.07791894	B	0.880100012	T	0.853299975	T	0.142000005	T	0.694599986	T			Bot	(T/C)
rs7023863	0.046710401	B												
rs7040015			0.794399977	A	0.864600003	C	0.965399981	C	0.857200027	A			Top	(A/C)
rs10977093	0.607663547	A	0.88349998	C	0.696500003	T	0.745899975	T	0.555199981	T	0.89410001	C	Top	(A/G)
rs7027686	0.230698489	B												
rs7027702			0.926999986	C	0.925999999	T	0.693099976	T	0.634599984	C	0.315100014	C	Top	(A/G)
rs7027844			0.599799991	T	0.297800005	T	0.041370001	T	0.400200009	T	0.634199977	C	Bot	(T/C)
rs2381800			0.207599998	T	0.355399996	T	0.292800009	T	0.52609998	T	0.890999973	T	Top	(A/G)
rs2890794			0.723699987	T	0.979799986	G	0.736699998	T	0.572099984	G	0.046209998	G	Bot	(T/G)
rs10758974			0.452800006	A	0.081129998	A	0.988099992	G	0.842400014	G			BOT	(T/C)
rs10815873			0.519599974	G	0.126100004	G	0.987800002	T	0.726700008	T			TOP	(A/C)
rs10977103	0.345656091	B	0.183899999	G	0.108599998	G	0.459300011	A	0.936399996	A			BOT	(T/C)
rs10977104	0.33672175	A												
rs10977105	0.642913581	B	0.241400003	T	0.096440002	T	0.829900026	C	0.661800027	T	0.088129997	T	Bot	(T/C)
rs1323584	0.775820878	B												
rs1323585	0.97446976	B												
rs10977109			0.088519998	G	0.223199993	G	0.474400014	G	0.3398	G	0.06106	G	Top	(A/C)
rs10815875			0.275099993	G	0.562399983	A	0.192699999	A	0.224800006	A	0.474900007	G	Bot	(T/C)
rs7853571	0.026356364	A												
rs16927880	0.362252736	B												
rs7869958	0.055785119	A												
rs2381802			0.264600009	G	0.604799986	A	0.190099999	A	0.224800006	A	0.402099997	G	Bot	(T/C)
rs12004152	0.601391212	A												
rs10977110			0.415300012	A	0.256399989	A	0.137799993	A	0.254299998	A	0.162799999	A	Bot	(T/C)
rs10815876			0.360199988	C	0.522099972	C	0.231199995	T	0.166299999	T			TOP	(A/G)
rs4742504			0.462000012	G	0.357300013	G	0.476399988	A	0.542699993	A	0.323799998	G	Bot	(T/C)
rs2890795			0.130600005	T	0.024219999	T	0.378399998	C	0.889599979	C	0.196999997	T	Bot	(T/C)
rs1323587	0.628729552	A												
rs16927892	0.888922963	B	0.664200008	G	0.488099992	G					0.271600008	A	Bot	(T/C)
rs10815877			0.939800024	G	0.212799996	G	0.666599989	A	0.579900026	G	0.186700001	G	Top	(A/G)
rs10815877	0.140798101	B	0.939800024	G	0.212799996	G	0.666599989	A	0.579900026	G	0.186700001	G	Top	(A/G)
rs10815878			0.618900001	A	0.115999997	A	0.632200003	G	0.927600026	A	0.493400008	A	Bot	(T/C)
rs10977117			0.647499979	C	0.773800015	C	0.304500014	T	0.999300003	T	0.377200007	C	Bot	(T/C)
rs12375663	0.827771178	B	0.253399998	T	0.110299997	T	0.880699992	C	0.611800015	T	0.844900012	T	Top	(A/G)
rs10977119			0.234599993	G	0.947000027	G	0.390399993	A	0.979099989	A	0.986199975	G	Top	(A/G)
rs12375674			0.667100012	T	0.519200027	T	0.899299979	C	0.630699992	T	0.856700003	T	Bot	(T/C)
rs1323588			0.598699987	C	0.718400002	C	0.468400002	C	0.829999983	T	0.528699994	C	Top	(A/G)
rs7031287			0.953000009	C	0.9296	T	0.219500005	C	0.799799979	C	0.228300005	C	Top	(A/G)
rs7870456			0.265799999	T	0.390899986	T	0.141299993	T	0.483200014	T	0.783599973	T	Bot	(T/C)
rs1323589	0.905769041	B												
rs1407971	0.321675546	B												
rs1323590	0.186402589	B	0.684099972	G	0.755200028	A	0.101999998	A	0.349000007	A	0.137600005	A	Top	(A/G)
rs7863545	0.628271812	B												
rs1323591			0.731700003	C	0.780099988	C	0.205599994	C	0.859700024	C	0.3468	C	Bot	(T/C)
rs1323591	0.193627092	B	0.731700003	C	0.780099988	C	0.205599994	C	0.859700024	C	0.3468	C	Bot	(T/C)
rs17649066	0.54188524	B												
rs6477310	0.201758989	B												
rs7024486			0.513999999	G	0.540400028	G	0.841700018	T	0.344700009	G			Bot	(T/G)
rs10122691	0.636960115	A												
rs10977128	0.951755844	B												
rs10977129	0.109809224	A												
rs2296097	0.850470825	B												
rs1407972			0.283800006	C	0.378199995	C	0.879999995	T	0.227799997	C	0.702199996	C	Top	(A/G)
rs1407972	0.646017786	A	0.283800006	C	0.378199995	C	0.879999995	T	0.227799997	C	0.702199996	C	Top	(A/G)
rs10511495														
rs2281747	0.986449881	A	0.83069998	A	0.101499997	A	0.667800009	G	0.754700005	A	0.400999993	A	Top	(A/G)
rs10815880	0.529804875	A	0.390599996	G	0.264999986	G	0.620000005	T	0.826399982	G			TOP	(A/C)
rs10758975	0.259352715	B	0.614600003	T	0.477600008	T	0.723399997	G	0.850700021	T			TOP	(A/C)
rs13301764	0.381476453	A	0.181199998	A	0.694100022	G	0.505599976	A	0.803300023	A			Bot	(T/C)
rs12340424	0.174285367	B												
rs13286656			0.1998	C	0.751800001	T					0.114799999	T	Bot	(T/C)
rs10511496														
rs7862199			0.876800001	A	0.413700014	G	0.429399997	A	0.984799981	G	0.341500014	G	Bot	(T/C)
rs1359119			0.451700002	G	0.656199992	G	0.718200028	A	0.6875	G	0.997399986	A	Top	(A/G)
rs1359120			0.2095	G	0.572300017	A	0.519900024	G	0.450399995	G	0.189400002	A	Bot	(T/C)
rs4625085	0.573238581	B												
rs12337324	0.463630392	A					0.323399991	A	0.664900005	A			Bot	(T/C)
rs7852952			0.685599983	G	0.405400008	G	0.26879999	G	0.824500024	A	0.892199993	A	Top	(A/G)
rs2296099			0.321799994	T	0.208000004	T	0.885299981	C	0.566100001	T			Top	(A/G)
rs12346891	0.023081621	B												
rs10977136	0.729551663	B												
rs10977138							0.816200018	T	0.610199988	C			Top	(A/G)
rs2381803			0.520299971	C	0.661599994	C	0.847000003	C	0.252600014	C	0.328299999	T	Top	(A/G)
rs10977144			0.240899995	C	0.881699979	C	0.85799998	T	0.759599984	C	0.05494	T	Bot	(T/C)
rs10977146			0.462900013	T	0.148900002	T	0.73180002	T	0.219300002	T	0.97420001	T	Bot	(T/C)
rs13286274			0.994400024	T	0.414499998	C	0.276499987	T	0.803799987	C	0.361000001	C	Top	(A/G)
rs12340876	0.513902023	B												
rs10977148	0.729872246	B												
rs2381804			0.391799986	C	0.3486	C	0.756900013	C	0.140599996	C	0.389899999	T	Top	(A/G)
rs767675			0.51819998	G	0.628099978	G	0.979700029	A	0.152899995	G	0.371699989	A	Top	(A/G)
rs10815885			0.560299993	C	0.673900008	C	0.663100004	C	0.407999992	C			Bot	(T/C)
rs13294270	0.638903744	B												
rs10511497														
rs10511498														
rs10117986			0.519999981	T	0.570900023	T	0.913999975	C	0.200299993	T	0.286199987	C	Bot	(T/C)
rs17650044			0.754599989	C	0.581399977	C	0.049109999	C	0.01304	C	0.842999995	C	Bot	(T/C)
rs10117452	0.425373578	B												
rs10977154			0.55430001	C	0.996200025	T	0.389899999	T	0.78579998	T	0.046179999	T	Bot	(T/C)

Continued on next page

Supplementary Table S1. ***Continued.***

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase
rs16928002	9	8474039	0.444299996													
rs12344148	9	8474240	0.145400003													
rs13286908	9	8475201	0.145400003													
rs7863060	9	8475686	0.188700005													
rs2296101	9	8479006	0.005076697	-	C	T					0.642894731	A	0.859677733	A	0.722742554	A
rs2296101	9	8479006	0.005076697		C	T					0.353552938	A	0.869562138	A		
rs2296101	9	8479006	0.019645493	-	C	T	0.794012878	A	0.019645493	A					0.379775573	A
rs2296102	9	8479105	0	+	G	T	0.507899821	B	0.982948429	A						
rs12349550	9	8479127	0	-	C	T	0.089447793	A	0.097861058	B						
rs13301979	9	8480822	0.037659999													
rs10120463	9	8480886	0.136993759													
rs6477311	9	8481878	0.055530001	-	A	T					0.516830422	B	0.97584411	A		
rs17650289	9	8483161	0.018521364	-	C	G	0.204184941	B	0.551602888	A						
rs7858815	9	8484221	0.018521364	-	C	T	0.134926578	A	0.018521364	A	0.44057919	A	0.676373028	A	0.863640551	B
rs10815888	9	8484280	0													
rs10121790	9	8486566	0	+	C	G	0.903923161	B	0.324185424	B	0.592809383	A	0.46105985	A		
rs10115800	9	8489081	0.339399993													
rs10115201	9	8489216	0.096336325													
rs10124277	9	8489295	0.096336325	+	C	T	0.170572888	B	0.798428435	A	0.25669625	B	0.776472492	A	0.539521383	A
rs7035558	9	8490472	0.098899998													
rs6477312	9	8491698	0.056230001													
rs13296910	9	8492071	0.016543709													
rs4409447	9	8492387	0.016543709	+	C	T	0.016543709	B	0.782312968	B	0.349891079	B	0.439910853	A	0.950346357	A
rs10977164	9	8492403	0.01077802	-	C	G	0.202255855	B	0.077574864	A						
rs4495488	9	8492734	0.01077802	-	A	G	0.01077802	A	0.608550233	A						
rs16928058	9	8493996	0.04507													
rs10758977	9	8494101	0.051879998	+	G	T	0.739821593	A	0.096185938	A	0.848993338	B	0.653769792	A	0.303110863	A
rs7868790	9	8495087	0.021455469	+	A	G					0.988648733	B	0.553610725	B		
rs7868790	9	8495087	0.021455469	+	A	G	0.848823483	A	0.021455469	A					0.870094533	A
rs1998513	9	8498015	0.176178667	+	G	T					0.343252774	B	0.564803721	A	0.412168462	A
rs1998516	9	8498148	0.04738													
rs1535678	9	8499378	0.034170002													
rs16928072	9	8499880	0.034170002													
rs10977166	9	8500505	0.004715													
rs1998517	9	8502133	0													
rs4493958	9	8502200	0	+	A	G	0.630081032	B	0.293229613	A						
rs1323578	9	8503123	0.007829509	+	G	T	0.457141586	B	0.233557665	A						
rs10217685	9	8504164	0.007829509	-	G	T	0.84166755	A	0.007829509	A						
rs13288392	9	8504338	0.020160001													
rs10117042	9	8506003	0.120800003													
rs10119236	9	8506194	0.03407													
rs10815897	9	8507383	0.03407													
rs10120190	9	8507545	0.086223127	-	C	T	0.680711755	B	0.331378563	A	0.766270324	A	0.449842646	A	0.470057999	A
rs10977170	9	8507705	0.269488024	-	C	T					0.908318981	B	0.269488024	B		
rs7026388	9	8508143	0.386099994													
rs3763653	9	8508395	0.086762286													
rs7039690	9	8510287	0.086762286	+	A	G					0.524475159	A	0.086762286	A		
rs7039690	9	8510287	0.014850134	+	A	G									0.807908145	B
rs7023008	9	8510366	0.014850134	-	C	T	0.600956123	B	0.259719828	B	0.808215211	A	0.539051264	A	0.708258997	A
rs7043375	9	8510505	0.059090801	-	A	G	0.768624965	A	0.301172582	B						
rs7024591	9	8510831	0.059303216	-	A	G					0.863264263	B	0.486164747	A		
rs7024591	9	8510831	0.00628617	-	A	G	0.791246827	B	0.174903209	B					0.317647457	B
rs1407970	9	8510995	0.00628617	-	C	G					0.00628617	B	0.77395982	B	0.52107827	B
rs1407970	9	8510995	0.160133132	-	C	G	0.802936186	B	0.73091187	A					0.518194591	B
rs10511499	9	8511121	0.035	+	A	C					0.913868784	B	0.160133132	A	0.410352773	B
rs3818346	9	8511244	0.035													
rs6477314	9	8512326	0.036529999													
rs13288779	9	8512483	0.086280003	+	C	T	0.221151343	A	0.715478698	A						
rs7048949	9	8512617	0.059728065	-	C	T	0.803007606	A	0.401344599	B						
rs10977176	9	8514448	0.012277775	-	A	G	0.697546875	A	0.059728065	B	0.746004084	A	0.974199479	B	0.152917653	A
rs2273998	9	8514854	0.012277775	+	C	T	0.012277775	B	0.321287686	A	0.971748899	B	0.329868293	A	0.683484134	A
rs10815900	9	8515684	0.111100995													
rs1337812	9	8517068	0.111100995	+	A	G	0.451365036	B	0.727144934	B						
rs10815906	9	8521899	0.003176934		C	T					0.502261389	A	0.731795772	B		
rs10815906	9	8521899	0.003176934	+	C	T	0.351564771	B	0.102170352	A					0.373626012	B
rs10758979	9	8521950	0.004230028													
rs7849367	9	8522140	0.004230028	-	C	T	0.800037135	B	0.738865587	B	0.29413595	B	0.373319467	A	0.21519014	A
rs12350641	9	8522620	0.076640002													
rs10758982	9	8523412	0.076640002													
rs7046918	9	8524385	0.021622205													
rs2031212	9	8526034	0	-	C	G	0.135745977	B	0.030172451	A	0.241023279	B	0.61107749	A	0.981039227	A
rs16928116	9	8527929	0	-	A	G	0.371134222	B	0.753794801	B						
rs2184978	9	8528919	0.23734157													
rs10977193	9	8532019	0.05201	-	C	T					0.769981948	B	0.23734157	A		
rs7856850	9	8536095	0.05201													
rs10977195	9	8539939	0.108400002													
rs7864527	9	8543569	0.108400002													
rs10217447	9	8544938	0.029864543													
rs7038093	9	8546180	0.006545511	-	A	G	0.638710116	A	0.668687932	A	0.495765556	B	0.968035795	B	0.529904096	A
rs7846893	9	8546633	0.005805359	+	A	G	0.942258155	B	0.042810455	B	0.812795925	A	0.324279201	B	0.024376716	B
rs16928124	9	8547264	0.005805359	+	A	G	0.746242	B	0.543476181	B	0.804660033	A	0.138659082	B	0.208083578	A
rs7026937	9	8548331	0	+	A	G	0.307263944	A	0.160158053	B	0.837573645	A	0.399320762	A	0.085284644	B
rs4742518	9	8552056	0	+	C	T	0.145492419	B	0.106023744	A	0.071032195	B	0.556152016	A		
rs13294631	9	8552080	0.015614778	-	A	G	0.880801684	A	0.015614778	B	0.462808358	B	0.18628358	B	0.609449122	B
rs10511500	9	8555802	0.061500002	+	A	C					0.462085915	A	0.979580177	B	0.803435012	A
rs10511501	9	8557192	0	-	A	C					0.391749627	A	0.742848484	B	0.444179991	B
rs10977206	9	8557499	0	-	A	G	0.787700118	A	0.814396264	B						
rs16928138	9	8558049	0.012885652	+	A	G	0.15372858	A	0.290816617	B	0.832460417	A	0.108474427	B	0.140415419	B
rs10977207	9	8559186	0.036626229													
rs10511502	9	8563166	0.019276054	+	C	T					0.08481719	B	0.036626229	A	0.235811517	B
rs10511502	9	8563166	0.006921	+	C	T	0.019276054	A	0.246971906	B						
rs1337811	9	8564577	0.006921	+	C	T	0.060058503	B	0.353366037	B						
rs10511503	9	8566853	0.002757299	-	A	G					0.157099307	A	0.782036828	A	0.192864763	A
rs10511503	9	8566853	0.002757299	-	A	G	0.02396136	B	0.206653693	A					0.103989484	A
rs10977210	9	8568261	0.009404696	+	C	T	0.20292346	A	0.488506285	A					0.421262495	B
rs7023351	9	8568551	0.009404696	-	C	T	0.058687435	A	0.334474314	A	0.163223732	A	0.796423584	B	0.564051124	B
rs7031249	9	8572176	0.136800006													
rs12340105	9	8572187	0.016620001													
rs7020647	9	8572241	0.016620001													
rs13293506	9	8574312	0													
rs10977219	9	8574715	0	+	C	T	0.231439872	B	0.449869694	A						
rs7861140	9	8575188	0.046673759													
rs16928146	9	8579809	0.046673759	+	C	G					0.107932145	B	0.066444253	B	0.046673759	B
rs16928146	9	8579809	0.046763444	+	C	G	0.29239583	B	0.193829126	B						
rs12000186	9	8580026	0.046763444	-	A	G	0.046763444	B	0.25039936	A						
rs2184979	9	8580341	0.023193355													
rs1999850	9	8583035	1.37719E-07	-	C	T	0.023193355	A	0.315448402	A						

rs_id	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase
rs16928002																				
rs12344148																				
rs13286908																				
rs7863060																				
rs2296101																				
rs2296101																			0.005076697	B
rs2296101	0.99286944	B	0.983754996	B	0.682992691	B	0.106299996	A	0.345919861	B	0.446700007	B	0.67674019	B	0.046742898	A	0.071460345			
rs2296102							0.089649998	A			0.1162	B		B			0.223064523			
rs12349550							0.066830002	B			0	B		B			0.092058916			
rs13301979																				
rs10120463																				
rs6477311																			0.136993759	B
rs17650289							0.377499998	A			0.055530001	B		B			0.233900444			
rs7858815	0.624005679	A	0.372581039	B	0.72921484	B	0.509899974	A	0.1582605	B	0.733399987	A	0.607767917	B	0.849050303	A	0.025753087	A	0.240891857	B
rs10815888																				
rs10121790			0.286818041	A	0.058965379	A	0.450800002	A	0.573752036	A	0	A	0.858800185	A	0.339778755	A	0.029118775	A	0.275954651	B
rs10115800																				
rs10115201																				
rs10124277	0.096336325	A	0.817711645	B	0.837196071	A	0.1611	A	0.819752848	B	0.123899996	B	0.610373624	B	0.87797588	A	0.436500711	A	0.69675747	A
rs7035558																				
rs6477312																				
rs13296910																				
rs4409447	0.35901331	A	0.665260683	B	0.656985423	A	0.109200001	A	0.795028649	B	0.123899996	B	0.481197432	B	0.714152173	B	0.856301976		0.61829346	A
rs10977164							0.476700008	B			0.936200023	B					0.2003193	A		
rs4495488							0.109200001	B			0.153899998	A		B			0.375690838			
rs16928058																				
rs10758977	0.901138252	A	0.550223715	A	0.405411991	A	0.051879998	A	0.929227142	B	0.441000015	B	0.731488306	B	0.105840887	A	0.199508673		0.766416446	B
rs7868790																			0.347104367	B
rs7868790	0.101770023	B	0.986419639	B	0.973323374	A	0.77579999	A	0.119613977	B	0.968400002	A	0.152524098	B	0.531457994	A	0.322844799			
rs1998513	0.305068676	A	0.67775939	A	0.864804421	A			0.176178667	A			0.356087098	A	0.579897785	A			0.808628927	B
rs1998516																				
rs1535678																				
rs16928072																				
rs10977166																				
rs1998517																				
rs4493958							0.570900023	A			0	A					0.120144822	A		
rs1323578							0.035670001	A			0.613399983	B					0.910049607	A		
rs10217685							0.88380003	B			0.669700027	A		B			0.243598264			
rs13288392																				
rs10117042																				
rs10119236																				
rs10815897																				
rs10120190	0.998018064	A	0.306358969	A	0.552759996	B	0.732500017	A	0.866140207	B	0.772599995	B	0.698389149	A	0.086223127	A	0.447628971	A	0.381311221	A
rs10977170																			0.676801236	B
rs7026388																				
rs3763653																				
rs7039690																			0.284482768	B
rs7039690	0.526488428	A	0.610237926	A	0.116407932	B			0.259521908	B			0.094635833	A	0.508109116	A				
rs7023008	0.578906621	A	0.597539592	A	0.100287542	B	0.945299983	B	0.426074298	B	0.886900008	B	0.152060308	A	0.404335306	A	0.014850134	A	0.087181298	B
rs7043375							0.222800002	B			0.289200008	B					0.059090801	A		
rs7024591																			0.062159934	A
rs7024591	0.090700319	B	0.059303216	A	0.960972081	B	0.658800006	A	0.891090092	A	0.932900012	B	0.820020957	B	0.338553632	B	0.107570535			
rs1407970																				
rs1407970	0.817606936	A	0.262475134	B	0.564934604	B	0.726499975	A	0.455684887	B	0.240400001	A	0.227474608	A	0.162816044	A	0.940959717	A		
rs10511499																				
rs3818346																				
rs6477314																				
rs13288779							0.717400014	B			0.6602	A		B			0.90317209			
rs7048949							0.184100002	A			0.629000008	B		B			0.232258114			
rs10977176	0.278129034	B	0.571824462	B	0.670726099	A	0.137099996	B	0.308042344	A	0.792999983	A	0.694310578	A	0.635343703	B	0.781219284	A	0.297832233	A
rs2273998	0.647079598	B	0.656146401	A	0.892127823	B	0.956200004	A	0.213675213	B	0.616999984	B	0.025600761	B	0.69789587	B	0.922374447		0.558408878	A
rs10815900																				
rs1337812							0.739300013	A			0.208100006	B		B			0.111100995			
rs10815906																			0.242797817	B
rs10815906	0.416495081	A	0.323684154	A	0.308604123	A	0.955799997	B	0.309135144	A	0.471399993	A	0.923312709	B	0.780486586	A	0.003176934			
rs10758979																				
rs7849367	0.973716144	B	0.841292159	A	0.231232685	B	0.639599979	B	0.357687195	B	0.312599987	A	0.196329619	A	0.490925898	B	0.004230028	A	0.048403344	B
rs12350641																				
rs10758982																				
rs7046918																				
rs2031212	0.698584104	A	0.518303969	A	0.493728596	A	0.781000018	B	0.716332814	B	0.852500022	A	0.196908871	A	0.322973306	A	0.021622205	A	0.688094855	A
rs16928116							0.793200016	B			0	A					0.628205608	A		
rs2184978																				
rs10977193																			0.672423693	B
rs7856850																				
rs10977195																				
rs7864527																				
rs10217447																				
rs7038093	0.440669185	B	0.810725166	B	0.243801173	A	0.905300021	A	0.621049083	A	0.91900003	B	0.707525478	A	0.46252123	B	0.029864543	A	0.043319827	A
rs7846893	0.694228662	A	0.006545511	B	0.057682951	A	0.882399976	B	0.793882051	A	0.936200023	A	0.120851015	B	0.389433971	A	0.36294638		0.446862974	B
rs16928124	0.6181415	B	0.864938755	A	0.167331477	B	0.905200005	B	0.01960951	A	0.117799997	B	0.866166986	B	0.80461723	B	0.005805359		0.96568294	B
rs7026937	0.013803615	A	0.413817599	A	0.31826801	B	0.650699973	A	0.074391952	A	0.936200023	A	0.46833088	B	0.742470125	A	0.891928323		0.459795316	B
rs4742518	0.782941035	B	0.428486543	B	0.033589365	A			0.167121162	B	0	A	0.284096255	A	0.923045908	A	0.929043162	A	0.856478975	B
rs13294631	0.320302067	A	0.288305788	B	0.687120608	B	0.514800012	B	0.114867691	B	0.445100009	B	0.918730547	B	0.770192517	B	0.152056902		0.231912807	A
rs10511500																				
rs10511501																				
rs10977206							0.514800012	A			0	B		B			0.004865903			
rs16928138	0.012885652	A	0.936268551	A	0.044563581	B	0.170699999	B	0.879943709	B	0.343699992	B	0.446017597	B	0.920748977	B	0.086653473		0.95450285	B
rs10977207																				
rs10511502																				
rs10511502							0.554199994	B			0.370799989	B		B			0.028675062			
rs1337811							0.702300012	B			0.682699978	B		B			0.661940996			
rs10511503																				
rs10511503	0.018639134	B	0.206437232	B	0.560314226	A	0.071520001	A	0.622738876	A	0.219300002	A	0.898730986	A	0.725950606	B	0.002757299	A		
rs10977210	0.680936286	B	0.522562369	A	0.832166747	A	0.796199977	B	0.01349032	A	0.857900024	A	0.786847962	A	0.714256345	B	0.932653262	A		
rs7023351	0.745313558	A	0.515767387	A	0.114040653	A	0.779500008	B	0.009404696	A	0.857900024	A	0.747539966	B	0.362117645	B	0.895733049		0.254649887	B
rs7031249																				
rs12340105																				
rs7020647																				
rs13293506																				
rs10977219							0.221900001	B			0	A		B			0.887710945			
rs7861140																				
rs16928146																				
rs16928146							0.467700005	B			0.888899982	B		B			0.96059222			
rs12000186							0.159400001	A			0.289200008	A					0.292250368	A		
rs2184979																				
rs1999850							0.647199988	B			0.584699988	A		B			0.776417283			

rs_id	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs16928002					0.532899976	C	0.910899997	C	0.745299995	T	0.904699981	C			BOT	(T/C)
rs12344148									0.888800025	T	0.444299996	T			BOT	(T/G)
rs13286908					0.776600003	T	0.592599988	C	0.993499994	T	0.628300011	C	0.145400003	C	Bot	(T/C)
rs7863060					0.655799985	T	0.655900002	C	0.822799981	T	0.737600029	C			TOP	(A/G)
rs2296101					0.444000006	G	0.42930001	G	0.983399987	A	0.188700005	G	0.334199995	A	Top	(A/G)
rs2296101					0.444000006	G	0.42930001	G	0.983399987	A	0.188700005	G	0.334199995	A	Top	(A/G)
rs2296101	0.365200013		0.824530222	A	0.444000006	G	0.42930001	G	0.983399987	A	0.188700005	G	0.334199995	A	Top	(A/G)
rs2296102	0.216800004		0.324527558	B	0.512799978	G	0.914099991	G	0.532500029	T	0.924000025	T	0.045329999	T	Bot	(T/G)
rs12349550	1		0.786497051	B												
rs13301979					0.66869998	G	0.242899999	G	0.236599997	G	0.050930001	G	0.037659999	G	Top	(A/G)
rs10120463									0.373400003	G	0.855099976	T			Top	(A/C)
rs6477311																
rs17650289	0.496100009		0.505703095	B												
rs7858815	1		0.505346277	A	0.563799977	G	0.314799994	G	0.50940001	G	0.131200001	G	0.949100018	A	Bot	(T/C)
rs10815888					0.492900014	C	0.102700003	C	0.714699984	C	0.237200007	C	0.837499976	A	Top	(A/C)
rs10121790	1		0.973947285	B												
rs10115800									0.901499987	T	0.339399993	T			Bot	(T/G)
rs10115201					0.803300023	A	0.695900023	G	0.982500017	G	0.731899977	A			TOP	(A/G)
rs10124277	0.315800011		0.393757903	B	0.630400002	C	0.879800022	T	0.757700026	C	0.391000003	C			Top	(A/G)
rs7035558					0.441700012	C	0.453200012	C	0.875899971	T	0.378100008	C			TOP	(A/G)
rs6477312					0.858200014	A	0.800800026	A	0.870100021	A	0.321399987	A	0.098899998	G	Bot	(T/C)
rs13296910					0.468899995	A	0.056230001	A	0.950900018	G	0.691200018	A			Bot	(T/C)
rs4409447	0.497999996		0.518118819	B	0.464100003	T	0.075539999	T	0.4551	C	0.990999997	T	0.082340002	T	Bot	(T/C)
rs10977164	1		0.567086453	A												
rs4495488	0.889599979		0.873938938	B												
rs16928058					0.461400002	C	0.04507	C	0.401300013	C	0.48089999	C			Bot	(T/G)
rs10758977	0.492300004		0.698451773	B												
rs7868790																
rs7868790	0.827799976		0.858757474	B												
rs1998513					0.408600003	T	0.340200007	T	0.909399986	G	0.363000006	T	0.893999994	G	Top	(A/C)
rs1998516					0.356900007	G	0.333400011	G	0.975000024	A	0.501299977	G			TOP	(A/G)
rs1535678					0.249300003	A	0.04738	A	0.529600024	A	0.806100011	A	0.225299999	C	Top	(A/C)
rs16928072					0.531899989	C	0.447100014	C	0.327499986	C	0.435499996	C	0.034170002	T	Bot	(T/C)
rs10977166									0.963500023	T	0.628600001	C			Top	(A/G)
rs1998517					0.041609999	T	0.004715	T	0.602299988	T	0.173199996	T	0.233600006	C	Top	(A/G)
rs4493958	1		0.743661206	A												
rs1323578	0.484899998		0.827077471	B	0.302399993	G	0.165800005	G	0.249799997	G	0.245000005	G	0.01521	T	Top	(A/C)
rs10217685	1		0.150889329	A												
rs13288392					0.268299997	C	0.137099996	C	0.485399991	C	0.481999993	C	0.020160001	T	Bot	(T/C)
rs10117042					0.4005	T	0.353500009	T	0.69599998	C	0.451999992	T	0.950999975	C	Bot	(T/C)
rs10119236					0.296999991	G	0.147499993	G	0.82069999	G	0.251199991	G	0.120800003	A	Bot	(T/C)
rs10815897					0.098559998	C	0.066100001	C	0.871800005	C	0.516600013	C	0.03407	T	Bot	(T/C)
rs10120190	0.375400007		0.789067849	A												
rs10977170																
rs7026388					0.635999978	T	0.722299993	C	0.486400008	C	0.861100018	T			BOT	(T/C)
rs3763653					0.386099994	C	0.982900024	C	0.885200024	C	0.455599994	C			BOT	(T/C)
rs7039690					0.599399984	A	0.760299981	A	0.481999993	A	0.2359	A			BOT	(T/C)
rs7039690					0.599399984	A	0.760299981	A	0.481999993	A	0.2359	A			BOT	(T/C)
rs7023008	0.370900005		0.409615893	B	0.526600003	G	0.793900013	G	0.419099987	G	0.25029999	G	0.03028	A	Bot	(T/C)
rs7043375	1		0.830758534	A												
rs7024591																
rs7024591	0.280099988		0.562737726	A												
rs1407970																
rs1407970	1		0.281805778	B												
rs10511499					0.754100025	C	0.36469999	A	0.376100004	A	0.845300019	A	0.271499991	A	Top	(A/C)
rs3818346					0.217700005	C	0.140799999	C	0.484100014	C	0.177499995	C	0.035	T	Top	(A/G)
rs6477314					0.763700008	G	0.830799997	G	0.32280001	G	0.189799994	G	0.036529999	A	Top	(A/G)
rs13288779	0.910899997		0.842209576	A	0.789099991	T	0.638000011	T	0.999599993	C	0.308800012	C	0.086280003	C	Bot	(T/C)
rs7048949	0.172199994		0.18533979	B												
rs10977176	0.648599982		0.387819402	B	0.448399991	C	0.071819998	C	0.915199995	C	0.553200007	C	0.096340001	T	Top	(A/G)
rs2273998	0.274100006		0.402252648	A												
rs10815900					0.1237	G	0.632799983	G	0.584200025	T	0.664499998	G			Top	(A/C)
rs1337812	0.209600002		0.908255033	A												
rs10815906																
rs10815906	0.523100019		0.053866853	B												
rs10758979					0.088480003	C	0.544099987	C	0.678300023	T	0.314000011	C	0.252700001	T	Top	(A/G)
rs7849367	0.636900008		0.842094048	B	0.866900027	G	0.47209999	G	0.535899997	G	0.904399991	G	0.426499993	A	Top	(A/G)
rs12350641									0.160400003	A	0.235400006	A			Bot	(T/C)
rs10758982					0.569700003	A	0.806900024	G	0.664600015	A	0.237800002	A	0.076640002	G	Bot	(T/C)
rs7046918					0.986400008	A	0.964900017	A	0.478799999	A	0.763599992	A	0.527800024	G	Top	(A/G)
rs2031212	0.109999999		0.81458765	B												
rs16928116	1		0.091585063	A												
rs2184978					0.524900019	G	0.720799983	A	0.781199992	A	0.458299995	A	0.292499989	G	Bot	(T/C)
rs10977193																
rs7856850					0.572000027	C	0.615499973	C	0.774500012	C	0.166999996	C	0.05201	A	Top	(A/C)
rs10977195									0.149900004	A	0.523699999	A			Bot	(T/G)
rs7864527					0.728500009	A	0.1109	C	0.108400002	A	0.345299989	A			Bot	(T/G)
rs10217447					0.629800022	C	0.155699998	T	0.143700004	C	0.611000001	C	0.272700012	C	Bot	(T/C)
rs7038093	1		0.752050972	B					0.105099998	C	0.32069999	C			TOP	(A/G)
rs7846893	0.356000006		0.201038512	B												
rs16928124	0.070689999	B	0.800429624	A												
rs7026937	0.590300024		0.11581847	B					0.180800006	A	0.523800015	A			BOT	(T/C)
rs4742518	1		0.28252703	B												
rs13294631	0.241899997		0.422610252	A	0.520099998	T	0.299899995	T	0.578199983	C	0.939700007	C	0.699999988	T	Top	(A/G)
rs10511500					0.776300013	C	0.061500002	A	0.699899972	C	0.982800007	A			Top	(A/C)
rs10511501																
rs10977206	1		0.529675411	B												
rs16928138	1		0.904856014	B					0.198599994	A	0.323100001	A			Top	(A/G)
rs10977207					0.662299991	C	0.271699995	A	0.077699997	C	0.262800008	C	0.628499985	A	Top	(A/C)
rs10511502					0.613300026	T	0.934499979	C	0.730799973	T	0.576900005	T			Top	(A/G)
rs10511502	0.215499997		0.181035274	B	0.613300026	T	0.934499979	C	0.730799973	T	0.576900005	T			Top	(A/G)
rs1337811	0.925599992		0.573727998	B	0.275900006	T	0.268999994	C	0.006921	T	0.064719997	T			BOT	(T/C)
rs10511503																
rs10511503	0.213300005		0.346438722	B												
rs10977210	0.710500002		0.307276535	B	0.493499994	C	0.183500007	T	0.03678	C	0.224399999	C	0.75849998	C	Top	(A/G)
rs7023351	0.852800012		0.16921105	B												
rs7031249					0.390500009	A	0.231800005	G	0.136800006	A	0.321799994	A			Bot	(T/C)
rs12340105									0.59890002	A	0.494399995	A			Top	(A/C)
rs7020647					0.475400001	C	0.175799996	T	0.016620001	C	0.189199999	C	0.711099982	C	Bot	(T/C)
rs13293506					0.618799985	G	0.58160001	G	0.09076	A	0.083740003	A			BOT	(T/C)
rs10977219	1		0.796181335	A												
rs7861140					0.077859998	C	0.711899996	C	0.693199992	C	0.314900011	T	0.753199995	T	Bot	(T/C)
rs16928146																
rs16928146	1		0.499249236	A												
rs12000186	1		0.185417403	B												
rs2184979					0.273999989	T	0.072740004	T	0.769299984	C	0.166500002	C			Top	(A/G)
rs1999850	0.593500018		0.144798737	B	0.346300006	A	0.157299995	A	0.77609998	G	0.280800015	G	0.538299978	G	Top	(A/G)

Continued on next page

Supplementary Table S1. ***Continued.***

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase
rs10511504	9	8583619	1.37719E-07	+	A	G					0.224193633	B	1.38E-07	B	0.808437559	A
rs7020239	9	8585338	0.002648866	+	A	G	0.096832649	B	0.089938317	B	0.377336382	B	0.482039656	B	0.482188165	A
rs7035431	9	8585416	0.00215742													
rs16928162	9	8588088	0.00215742	+	C	G	0.012249575	A	0.18488214	B	0.150933102	A	0.534872203	B	0.023003543	B
rs9792470	9	8588737	0.016274255													
rs16928175	9	8592323	0.001580145	-	C	T	0.224306732	A	0.016274255	B	0.147950182	A	0.199577201	B	0.555254638	A
rs7031127	9	8592483	0.001580145	+	C	T	0.753519183	B	0.184721476	A	0.735382048	A	0.001580145	A		
rs16928179	9	8592903	0.143991653	-	C	T	0.275067475	A	0.14857234	A					0.512212935	B
rs10977228	9	8593043	0.040602345	-	C	T	0.475838558	A	0.41913538	B						
rs9792461	9	8593606	0.025366964	+	A	G	0.358126386	A	0.040602345	A					0.866106522	B
rs12340778	9	8594376	0.004813482	+	A	G	0.632272611	B	0.89164683	A						
rs17573565	9	8594583	0.004813482	+	A	C	0.839643247	B	0.232003349	A	0.940874947	B	0.128742666	A	0.916348447	B
rs9697029	9	8595589	0.079460003	-	C	G	0.310198299	B	0.783969159	B						
rs7853846	9	8598068	0.02203													
rs16928196	9	8598349	0.02203													
rs2175595	9	8598381	0.349700004	+	A	T					0.866710251	B	0.967181305	B	0.507210417	A
rs7043072	9	8599905	0.171000004													
rs16928206	9	8602672	0.034915694	+	C	T	0.63162555	B	0.382624711	A	0.736657639	B	0.968303644	B	0.906945319	A
rs1361117	9	8605045	0.02536677	-	C	T	0.431455373	A	0.225177144	B	0.056312987	B	0.36242422	B	0.956407536	A
rs2890818	9	8610137	0.02536677	+	C	T	0.037442696	B	0.880075608	B						
rs10758985	9	8610382	0.090459372													
rs1337808	9	8611368	0.090459372	-	A	C					0.336590347	A	0.090459372	A	0.68793696	B
rs1337808	9	8611368	0.153051959	-	A	C	0.863149773	A	0.200664705	A	0.153051959	A	0.241003986	A	0.585407452	B
rs10511505	9	8611568	0.075819999	-	C	G					0.223598448	B	0.51068699	B	0.61490372	A
rs12686827	9	8612613	0.008932436													
rs7046119	9	8618671	0.008932436	+	G	T	0.008932436	A	0.112818786	B						
rs3750490	9	8623097	0.003819187													
rs1512380	9	8625791	0.003819187	-	C	T	0.755946972	A	0.945638736	A	0.746849694	B	0.814812668	B	0.808627999	B
rs1512381	9	8625810	0.046580002													
rs12348522	9	8633259	0.029429772	+	C	T	0.063517161	A	0.993758174	A						
rs16928234	9	8635448	0.000845594	-	G	T					0.029429772	A	0.141250418	B		
rs16928238	9	8636183	0.000845594	-	G	T	0.072235275	A	0.416560807	B	0.730369393	A	0.147902197	B	0.802696373	B
rs1033125	9	8637808	0.161429085	-	C	T					0.556873614	B	0.568661336	B		
rs7041298	9	8639429	0.161429085	+	C	T	0.684155709	A	0.161429085	B						
rs1028018	9	8649757	0.51849997													
rs907625	9	8650158	0.158500001													
rs10977241	9	8652440	0.084953355	+	C	T	0.380940524	B	0.633309405	B						
rs17652834	9	8654452	0.084953355	+	C	T	0.084953355	A	0.707416492	B						
rs1025547	9	8654838	0.033293737								0.917970582	B	0.737075507	A	0.823320595	A
rs12683865	9	8659129	0.033293737	+	A	G	0.264547035	A	0.517914383	A						
rs10815923	9	8659273	0													
rs12350355	9	8659654	0	-	C	G	0.137100511	A	0.039154574	B						
rs10977243	9	8662042	0.163000003													
rs9886766	9	8665128	0.250400007													
rs9886768	9	8665366	0.085321091													
rs10124538	9	8665968	0.085321091	+	C	G	0.085321091	A	0.348343933	B						
rs10046849	9	8667054	0.010160091	+	G	T	0.979319324	B	0.851532049	A						
rs12338388	9	8671264	0.010160091	+	A	C	0.33468429	B	0.221917435	A	0.691529157	A	0.010160091	A		
rs7046585	9	8671940	0.025992938	+	C	T	0.728012475	B	0.826322174	A	0.433991712	B	0.064907369	A		
rs10511506	9	8672672	0.097800002	-	C	T					0.858439334	B	0.411916789	A	0.949961234	A
rs10511506	9	8672672	0	-	C	T	0.337673966	B	0.770644096	B						
rs10119928	9	8675047	0	+	C	T	0.00703107	B	0.000173588	A						
rs9969698	9	8675578	0.069982098	+	A	C					0.918004012	B	0.183990499	B		
rs9969698	9	8675578	0.288384611	+	A	C	0.515325957	A	0.811659821	B						
rs10481622	9	8676368	0.065260001													
rs7048587	9	8676437	0.019538045													
rs7030931	9	8680155	0.019538045	-	A	T	0.36694861	B	0.971741854	A	0.673782712	B	0.222590761	A	0.368729915	A
rs10122379	9	8683234	0.057609712	-	A	T	0.216445119	A	0.269644185	A	0.078183686	A	0.190593228	A	0.057609712	A
rs1434265	9	8683432	0.052859999	+	C	T	0.924242265	A	0.839796199	A	0.568869605	A	0.527672449	A	0.368255829	A
rs1434264	9	8683517	0.052859999													
rs10125358	9	8684330	0.01812	+	A	G	0.656922196	B	0.508392301	B	0.893121276	B	0.401347471	B	0.447852207	B
rs16928280	9	8685233	0.01812													
rs12685924	9	8685439	0.031020001													
rs1368981	9	8686227	0.034910001													
rs16928282	9	8687215	0.090236798	-	C	T	0.961362504	B	0.222133233	A	0.494042478	A	0.800138275	A	0.232165327	A
rs3817208	9	8688875	0.091370001													
rs1060612	9	8689017	0.014731627													
rs7849404	9	8689997	0.014731627	-	A	G					0.014731627	B	0.483128358	A		
rs7849404	9	8689997	0.070043652	-	A	G	0.500525308	A	0.993697089	A					0.737898492	A
rs10481623	9	8690396	0.069660001													
rs10758987	9	8692964	0.02964													
rs1543083	9	8693025	0.02964													
rs1434262	9	8693733	0.002607744	-	A	G					0.354731844	B	0.511206326	B	0.508116184	A
rs1579564	9	8694007	0.002607744	+	C	T					0.149146907	A	0.002607744	B		
rs1550002	9	8694192	1.22405E-06													
rs2137348	9	8695003	1.22405E-06	+	C	G					0.599694006	B	1.22E-06	A		
rs7867247	9	8695964	0.028130001	-	G	T	0.177701407	B	0.615567459	B					0.999917715	B
rs4742531	9	8696540	0.01412													
rs16924694	9	8698188	0.01412	+	C	G	0.29797014	A	0.199491741	A	0.516446748	A	0.298869755	B	0.861776536	A
rs17653604	9	8700180	0.01562	+	A	C	0.389549641	B	0.018356917	B	0.939384549	A	0.484254759	B	0.235892321	B
rs10977256	9	8701963	0.01562													
rs10758988	9	8702365	0.06191		G	T					0.412276287	B	0.621410673	A		
rs10758988	9	8702365	9.36773E-05	-	G	T	0.437119019	A	0.406769027	B						
rs10815925	9	8702601	9.36773E-05	+	C	G	0.65791566	B	0.522825957	A	0.790942005	B	0.097381373	A	0.322903281	A
rs4742532	9	8703924	0.004751088													
rs7854391	9	8706797	0.004751088	-	A	C	0.23155298	A	0.004751088	B	0.169432105	A	0.688598411	A	0.820205063	B
rs17575409	9	8708703	0.0135													
rs7866922	9	8709261	0.01019													
rs906636	9	8709322	0.01019	-	A	G					0.578226954	A	0.512880354	A	0.886131922	B
rs906636	9	8709322	0.006364819		A	G					0.203455745	A	0.480792263	B		
rs1865340	9	8709549	0.006364819	-	C	T	0.128277194	A	0.071383038	B	0.082024808	A	0.236258802	B	0.905128546	A
rs10977260	9	8710393	0.00669													
rs1877447	9	8711943	0.00669													
rs10977261	9	8712635	0.017859999													
rs1473822	9	8716153	0.006969621													
rs1004489	9	8723398	0.006969621	+	A	T	0.247345711	A	0.006969621	B	0.579195742	B	0.242953143	B	0.106883949	B
rs6477333	9	8727316	0.02225													
rs4742533	9	8728267	0.02225	+	C	T					0.701261988	A	0.526910168	A	0.805646053	B
rs4742533	9	8728267	2.73665E-06	+	C	T					0.812520667	A	0.185861197	B	0.499815824	A
rs4742535	9	8728812	2.73665E-06	-	C	T	0.471857677	A	0.663039922	A						
rs4740960	9	8728888	0.05944138	+	A	G	0.163323331	B	0.066126697	B						
rs7048772	9	8729025	0.013443725	+	A	G	0.323080904	B	0.107024899	A	0.88245674	B	0.719209431	B	0.898292644	A
rs10465099	9	8729061	0.013443725	+	C	T	0.410240254	A	0.506622494	A	0.582721566	A	0.399164844	B	0.697780463	A
rs7865769	9	8729407	0.067246578	+	C	T	0.504072347	B	0.671468327	B	0.974493405	A	0.089566753	B	0.326263942	B
rs7851825	9	8731153	1.36469E-05	-	A	T	0.623738931	A	0.884115858	A						
rs7862892	9	8731188	1.36469E-05	-	G	T	0.026068047	A	1.36469E-05	B	0.382993432	B	0.301745709	A		
rs2033554	9	8731389	0.004173024	-	A	C					0.174188766	B	0.004173024	A	0.358846445	A

rs_id	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase
rs10511504																
rs7020239	0.490512113	A	0.322945425	B	0.002648866	B	0.607200027	A	0.117256585	B	0.629999995	B	0.609181846	B	0.661655003	B
rs7035431																
rs16928162	0.114085141	A	0.325218498	B	0.260295764	B	0.277200013	B	0.00215742	A	0.145999998	A	0.058944041	B	0.43010615	B
rs9792470																
rs16928175	0.402637599	A	0.323601202	B	0.075346417	A	0.312700003	B	0.196734105	A	0.415699989	B	0.332974911	B	0.207904085	B
rs7031127			0.559747901	A	0.32919362	B	0.811999977	A	0.867356653	B	0.289200008	A	0.834213319	B	0.302504634	A
rs16928179	0.21551792	B	0.716264413	B	0.694223411	A	0.440499991	A	0.960252662	A	0.389600009	A	0.217806183	B	0.452263856	A
rs10977228											0.343699992	B				
rs9792461	0.180143751	B	0.862984437	A	0.555576143	A	0.81190002	A	0.813105489	B	0.473500013	A	0.151451398	B	0.325507699	A
rs12340778							0.3917	A			0.289200008	A		B		
rs17573565	0.991159329	B	0.509892898	A	0.840531734	B	0.489100009	B	0.004813482	B	0.065710001	A	0.416151644	B	0.408622702	A
rs9697029							0.758599997	B			0.079460003	B				
rs7853846																
rs16928196																
rs2175595																
rs7043072																
rs16928206	0.916646951	A	0.632004779	B	0.357511318	A	0.171000004	B	0.723818587	B	0.567900002	A	0.91775887	B	0.716903542	A
rs1361117	0.627591305	A	0.872565439	A	0.90354688	B	0.769800007	A	0.908734672	B	0.605199993	B	0.526935284	B	0.445638572	B
rs2890818							0.530300021	A			0.1567	A				
rs10758985																
rs1337808																
rs1337808	0.942095536	B	0.564956503	A	0.343095425	A	0.78640002	B	0.215960938	B	0.949699998	A	0.471537598	B	0.719596957	A
rs10511505																
rs12686827																
rs7046119							0.123999998	B			0.944999993	A		B		
rs3750490																
rs1512380	0.200281129	B	0.405946457	B	0.964374416	A	0.39230001	A	0.003819187	A	0.216700003	B	0.626036097	B	0.65417269	B
rs1512381																
rs12348522							0.733900011	B			0.914099991	A		B		
rs16928234																
rs16928238	0.282471047	A	0.444079285	B	0.271257242	A	0.838999987	B	0.000845594	A	0.216700003	B	0.833475932	B	0.296214577	B
rs1033125																
rs7041298							0.237800002	A			0.399100006	A				
rs1028018																
rs907625																
rs10977241							0.248199999	A			0.158500001	A		B		
rs17652834							0.314799994	A			0.095870003	B		B		
rs1025547																
rs12683865							0.136199996	B			0.467599988	A		B		
rs10815923																
rs12350355			0.101512332	B	0.181995158	A	0.680999994	B	0.563408274	A	0	B	0.39236104	B	0.008520574	A
rs10977243																
rs9886766																
rs9886768																
rs10124538							0.85769999	A			0.342400014	B		B		
rs10046849							0.664300025	A			0.289200008	B				
rs12338388			0.734684719	A	0.618373231	B	0.939400017	A	0.19295088	B	0.333900005	B	0.580656717	B	0.091820436	B
rs7046585			0.465763553	B	0.903462329	A			0.236046037	B	0.370799989	A	0.515743794	A	0.025992938	B
rs10511506																
rs10511506							0.308999986	A			0.097800002	B		B		
rs10119928							0.728399992	A			0	B		B		
rs9969698																
rs9969698							0.567300022	B			0.909500003	A		B		
rs10481622																
rs7048587																
rs7030931	0.304676634	A	0.559682986	A	0.294736636	B	0.220400006	A	0.219262937	B	0.531899989	A	0.019538045	A	0.442705058	B
rs10122379	0.858210422	B	0.304363736	B	0.218748933	B	0.573400021	A	0.629556038	B	0.629000008	A	0.444612222	B	0.085533583	B
rs1434265	0.448174474	A	0.08748773	A	0.562349793	B	0.231399998	A	0.131788266	B	0.531899989	A	0.206017863	A	0.896260481	B
rs1434264																
rs10125358	0.809510715	B	0.941518183	A	0.776190806	B	0.2368	B	0.79588594	B	0.46450001	B	0.573746885	B	0.972321016	A
rs16928280																
rs12685924																
rs1368981																
rs16928282	0.956272174	A	0.563203365	A	0.800824612	A	0.423000008	A	0.265566933	B	0.324299991	A	0.93058741	A	0.724303517	A
rs3817208																
rs1060612																
rs7849404																
rs7849404	0.145459844	A	0.228202644	A	0.221995927	B	0.373100013	B	0.720693745	A	0.467599988	A	0.127879862	B	0.728190784	B
rs10481623																
rs10758987																
rs1543083																
rs1434262																
rs1579564																
rs1550002																
rs2137348																
rs7867247	0.254225774	A	0.854043388	B	0.920143165	A	0.991299987	A	0.61056632	A	0.142100006	B	0.745474719	B	0.424646548	A
rs4742531																
rs16924694	0.24218903	B	0.068740577	B	0.112705658	B	0.871900022	B	0.680350679	B	0.01412	A	0.661555636	B	0.984745187	B
rs17653604	0.696879838	B	0.101954015	A	0.773343261	B	0.316900015	A	0.295598381	B	0.345600009	B	0.387248161	B	0.244158931	B
rs10977256																
rs10758988																
rs10758988							0.879499972	B			0.748399973	A				
rs10815925	0.142985524	A	0.167072284	A	0.000343437	B	0.535099983	B	0.250533254	B	0.429399997	B	0.684759486	B	0.214230534	A
rs4742532																
rs7854391	0.147899296	B	0.632569336	A	0.273531811	B	0.65259999	A	0.226419355	A	0.933700025	A	0.843882063	B	0.52186316	A
rs17575409																
rs7866922																
rs906636																
rs906636																
rs1865340	0.593526518	A	0.403804155	B	0.014107056	B	0.718299985	A	0.128577192	A	0.260800004	B	0.878813345	A	0.92590957	B
rs10977260																
rs1877447																
rs10977261																
rs1473822																
rs1004489	0.860077982	B	0.223663326	B	0.115101408	B	0.855599999	B	0.979154584	A	0.133200005	A	0.631459683	B	0.402106005	A
rs6477333																
rs4742533																
rs4742533	0.672564271	B	0.531166786	B	0.977630841	A			0.907924712	A			0.77851213	B	0.744564638	A
rs4742535							0.735000014	A			0.703800023	A		B		
rs4740960							0.515299976	A			0.562399983	B				
rs7048772	0.317169504	A	0.242196047	A	0.312707197	B	0.836899996	A	0.328560119	B	0.909500003	A	0.46871991	B	0.817121252	B
rs10465099	0.276519025	A	0.488338734	A	0.013443725	A	0.919799984	A	0.10502517	B	0.864099979	A	0.829494998	B	0.385049635	B
rs7865769	0.966310307	B	0.120405354	A	0.478656305	B	0.948899984	A	0.170500771	A	0.909500003	A	0.661165348	B	0.531164514	B
rs7851825	0.136418252	B	0.357418308	A	0.136131698	B	0.924099982	B	0.871127602	B	0.931100011	B	0.213309955	A	0.123713307	B
rs7862892			0.605988466	B	0.621911631	A	0.574800015	A	0.682873241	B	0.92019999	B	0.22336766	A	0.989423455	A
rs2033554																

rs_id	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs10511504																				
rs7020239	0.887096006		0.111985342	A	0.832300007		0.067664096	A												
rs7035431									0.327699989	C	0.220899999	C	0.670000017	T	0.841000021	C	0.469000012	T	Top	(A/G)
rs16928162	0.128331237		0.642480298	B	1		0.433835063	B												
rs9792470									0.63349998	G	0.689199984	A	0.379500002	A	0.759999991	A	0.78579998	A	Bot	(T/C)
rs16928175	0.043173602	A	0.254019335	A	0.481000006		0.9122042	A												
rs7031127	0.002478638		0.706172614	A	1		0.337687548	B												
rs16928179	0.143991653				0.410600007		0.278480306	B												
rs10977228	0.84455508	A			0.727699995		0.856599896	B												
rs9792461	0.064474637				0.484899998		0.392263105	B	0.734399974	A	0.351700008	A	0.430099994	G	0.849699974	G			Bot	(T/C)
rs12340778	0.025366964				1		0.458506327	B												
rs17573565	0.854257279		0.998727224	A	0.274300009		0.698388381	B												
rs9697029	0.433991652	A			0.402700007		0.692154758	A												
rs7853846													0.995800018	T	0.287699997	T			Bot	(T/C)
rs16928196									0.944299996	G	0.02203	G	0.450100005	A	0.396600008	A			Bot	(T/C)
rs2175595																				
rs7043072									0.949800015	T	0.783599973	T	0.374599993	T	0.349700004	T			Top	(A/G)
rs16928206	0.329529698		0.82852023	A	0.294099987		0.538902995	B												
rs1361117	0.333149201	A	0.034915694	A	0.3116		0.037434847	A	0.996699989	G	0.713100016	G	0.809099972	A	0.249899998	A	0.452399999	A	Bot	(T/C)
rs2890818	0.02536677	A			0.912800014		0.730277664	A												
rs10758985									0.688600004	C	0.251399994	C	0.38440001	T	0.526600003	T	0.606999993	T	Top	(A/G)
rs1337808									0.397799999	C	0.94630003	C	0.283600003	A	0.62470001	C			BOT	(T/G)
rs1337808	0.344199351		0.451423555	B	0.191799998		0.809559063	B	0.397799999	C	0.94630003	C	0.283600003	A	0.62470001	C			BOT	(T/G)
rs10511505																				
rs12686827									0.310799986	C	0.149100006	C	0.529999971	A	0.075819999	A			TOP	(A/C)
rs7046119	0.21243711				0.314300001		0.043453093	B												
rs3750490									0.334199995	A	0.160600007	A	0.625400007	G	0.1087	G	0.391499996	G	Top	(A/G)
rs1512380	0.279149247		0.244796061	B	0.912599981		0.311483306	B												
rs1512381									0.766799986	T	0.046580002	T	0.87620002	C	0.211600006	C			BOT	(T/C)
rs12348522	0.4394112				0.313600004		0.193292673	B	0.505400002	C	0.453599989	T	0.99000001	T	0.933300018	C	0.96450001	T	Top	(A/G)
rs16928234			0.701312907	B					0.469399989	A	0.234300003	A	0.363299996	C	0.986299992	C	0.49849999	C	Top	(A/C)
rs16928238	0.534634015		0.360029423	B	0.664300025		0.416548444	B	0.646000028	A	0.062380001	A	0.27790001	C	0.663999975	A			Bot	(T/G)
rs1033125			0.483703407	B																
rs7041298	0.175205036	A			0.1928		0.948856136	B												
rs1028018									0.979799986	G	0.781599999	A	0.800100029	G	0.826300025	A			Top	(A/G)
rs907625									0.51849997	C	0.777899981	T	0.647599995	C	0.5977	T	0.592800021	T	Bot	(T/C)
rs10977241	0.358825255				0.60799998		0.161535799	B	0.56370002	T	0.407200009	T	0.657899976	T	0.337900013	C	0.223499999	T	Top	(A/G)
rs17652834	0.151478396				0.585399985		0.628121417	A												
rs1025547									0.514800012	G	0.819400013	T	0.614700019	G	0.950600028	G	0.548799992	T	Bot	(T/G)
rs12683865	0.033293737				0.256700009		0.053809466	B												
rs10815923									0.964399993	C	0.283499986	T	0.843999982	C	0.781599999	C	0.89200002	C	Top	(A/G)
rs12350355	0.072805333				1		0.205829044	B												
rs10977243									0.305599988	A	0.454600006	A					0.163000003	A	Bot	(T/C)
rs9886766													0.476300001	A	0.857599974	G			Top	(A/G)
rs9886768									0.739199996	A	0.295599997	G	0.411199987	G	0.250400007	G			Top	(A/G)
rs10124538	0.238515043				1		0.639714167	A												
rs10046849	0.50606477	A			0.590300024		0.514441763	B												
rs12338388	0.356424149	A	0.148107386	B	1		0.452213277	B												
rs7046585	0.558076569	A	0.10996497	B	1		0.941889984	A	0.936100006	T	0.569000006	T							Bot	(T/C)
rs10511506									0.997799993	A	0.208299995	A	0.899500012	A	0.621100009	G	0.337399989	G	Bot	(T/C)
rs10511506	0.639533281				0.692200005		0.805226666	B	0.997799993	A	0.208299995	A	0.899500012	A	0.621100009	G	0.337399989	G	Bot	(T/C)
rs10119928	0.028240961				1		0.705809816	B												
rs9969698			0.069982098	B																
rs9969698	0.288384611				0.583100021		0.499335367	A												
rs10481622													0.595300019	T	0.654500008	T			Top	(A/G)
rs7048587									0.863699973	T	0.065260001	C	0.264099985	T	0.563199997	T			BOT	(T/C)
rs7030931	0.1317099	A	0.112707514	A	0.564800024		0.170289099	A												
rs10122379	0.486120152		0.06886106	B	1		0.954770456	B												
rs1434265	0.664029912	A	0.253701708	A	0.733099997		0.776523483	A												
rs1434264									0.811399996	C	0.052859999	C	0.251500011	T	0.487100005	T			Bot	(T/C)
rs10125358	0.837647612		0.411912396	B	0.652700007		0.950623735	A												
rs16928280									0.443399996	T	0.01812	T	0.423200011	T	0.38350001	T			TOP	(A/G)
rs12685924									0.942600012	C	0.031020001	A	0.362300009	C	0.74059999	C	0.078589998	C	Bot	(T/G)
rs1368981									0.833999991	G	0.034910001	A	0.794700027	A	0.958199978	A	0.104599997	G	Top	(A/G)
rs16928282	0.090236798	A	0.298096819	A	0.323500007		0.308283918	B												
rs3817208									0.978600025	A	0.1241	A	0.189899996	G	0.482499987	G	0.091370001	G	Top	(A/G)
rs1060612									0.820500016	T	0.443800002	T					0.956099987	C	Top	(A/G)
rs7849404			0.953707278	A					0.666999996	C	0.388200015	C	0.744899988	C	0.959299982	T	0.170200005	T	Top	(A/G)
rs7849404	0.070043652				0.238000006		0.143607052	B	0.666999996	C	0.388200015	C	0.744899988	C	0.959299982	T	0.170200005	T	Top	(A/G)
rs10481623									0.89410001	G	0.093029998	G	0.317499995	T	0.257200003	T	0.363799989	T	Top	(A/C)
rs10758987									0.901499987	A	0.069660001	G	0.927299976	A	0.800999999	A	0.905499995	G	Top	(A/G)
rs1543083									0.756200016	C	0.02964	C	0.820800006	C	0.533900023	A	0.723800004	C	Top	(A/C)
rs1434262									0.41080001	G	0.118299998	G	0.215000004	A	0.395000011	A	0.739300013	G	Bot	(T/C)
rs1579564									0.624800026	G	0.883899987	G					0.469700009	A	Bot	(T/C)
rs1550002									0.958299995	T	0.944999993	T	0.361400008	G	0.513400018	G	0.91960001	T	Top	(A/C)
rs2137348																				
rs7867247	0.843124176	A			0.653699994		0.300212943	A	0.403100014	C	0.028130001	C	0.554899991	A	0.746500015	A	0.447600007	A	Bot	(T/G)
rs4742531									0.328700006	G	0.186000004	G	0.251300007	T	0.359899998	T	0.725799978	T	Bot	(T/G)
rs16924694	0.046511939		0.197309939	B	0.312999994		0.344160249	B												
rs17653604	0.748087963		0.513879679	B	1		0.095674957	B	0.424699992	A	0.096960001	C	0.667599976	C	0.89200002	C	0.809599996	C	Top	(A/C)
rs10977256									0.425900012	C	0.01562	C	0.050450001	T	0.424199998	T	0.912800014	T	Top	(A/G)
rs10758988			0.280271	A					0.917999983	C	0.06191	C	0.999899983	A	0.625199974	C	0.531400025	A	Bot	(T/G)
rs10758988	0.859428247	A			0.4718		0.616287517	A	0.917999983	C	0.06191	C	0.999899983	A	0.625199974	C	0.531400025	A	Bot	(T/G)
rs10815925	9.36773E-05	A	0.388372096	A	0.925599992		0.139622004	A												
rs4742532									0.643400013	A	0.719299972	A	0.863499999	A	0.924199998	A			BOT	(T/C)
rs7854391	0.294681047		0.438348113	B	1		0.210273804	B												
rs17575409									0.794099987	T	0.188500002	C	0.122900002	C	0.34040001	C	0.588699997	T	Top	(A/G)
rs7866922									0.522499979	T	0.0135	T	0.182600007	T	0.270099998	T			BOT	(T/C)
rs906636									0.442299992	A	0.01019	A	0.203999996	A	0.227799997	A			TOP	(A/G)
rs906636			0.529520804	A					0.442299992	A	0.01019	A	0.203999996	A	0.227799997	A			TOP	(A/G)
rs1865340	0.006364819	A	0.782644571	A	0.529399991		0.460733864	B												
rs10977260									0.115199998	C	0.040460002	C	0.120399997	T	0.09409	T	0.084200002	T	Top	(A/G)
rs1877447									0.362500012	G	0.00669	G	0.303299993	G	0.357199997	G	0.935000002	G	Top	(A/G)
rs10977261													0.182400003	T	0.486000001	T			Top	(A/C)
rs1473822									0.786800027	C	0.017859999	C	0.288899988	C	0.890399993	C	0.788200021	T	Top	(A/G)
rs1004489	0.954136568	A	0.576522146	B	1		0.633375872	B												
rs6477333									0.233400002	G	0.042130001	G	0.95630002	A	0.852900028	A	0.507799983	A	Top	(A/G)
rs4742533									0.070309997	T	0.036509998	T	0.341899991	C	0.02225	C			Bot	(T/C)
rs4742533			0.264940401	B					0.070309997	T	0.036509998	T	0.341899991	C	0.02225	C			Bot	(T/C)
rs4742535	2.74E-06				0.843999982		0.86909034	B												
rs4740960	0.05944138	A			1		0.853689421	A												
rs7048772	0.238905538		0.113421257	B	1		0.556539414	B												
rs10465099	0.02560524		0.420979769	B	0.202800006		0.87867349	A												
rs7865769	0.067246578		0.102689666	B	1		0.528505007	B												
rs7851825	0.268419089	A			1		0.543966572	A												
rs7862892	0.681963009	A	0.083709366	A	1		0.798414499	B												
rs2033554									0.5546	T	0.534500003	T	0.364600003	G	0.092799999	G			Bot	(T/G)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_ aa_Phase	nidaii_ea_P	nidaii_ ea_Phase	nida600k_ aa_P	nida600k_ aa_Phase	nida600k_ ea_P	nida600k_ ea_Phase	jgida_P	jgida_ Phase
rs1434270	9	8732914	0.14778285	-	C	G					0.854692481	A	0.14778285	B	0.930254406	A
rs7038493	9	8735520	0.242200002													
rs7869843	9	8736568	0.132150758													
rs7863593	9	8738942	0.084315486	+	C	T	0.561327587	A	0.681154444	A						
rs6477346	9	8739291	0.008301	+	C	G	0.300138127	A	0.530513994	A	0.956003358	A	0.267601171	A	0.180689868	A
rs10815927	9	8741361	0.008301													
rs12338284	9	8741968	0.025968475	+	A	G	0.226256007	A	0.940087779	B						
rs10977277	9	8741985	0.025968475	-	C	T	0.025968475	A	0.644763247	A						
rs7861848	9	8743534	0.085461787	-	A	G	0.839755443	A	0.527589436	B						
rs720821	9	8746012	0.01505								0.085461787	A	0.694998631	B	0.547536227	B
rs956154	9	8746140	2.02122E-05	+	A	C					0.78177339	B	0.952989033	A	0.950741274	B
rs956154	9	8746140	2.02122E-05	+	A	C	0.00426362	B	0.979311445	B					0.8503289	A
rs10117781	9	8747828	0.299600005													
rs10511507	9	8749490	0.001146356	-	C	G					0.470201585	A	0.578556105	A	0.635602518	B
rs10116682	9	8751778	0.001146356	+	A	C	0.328651779	B	0.023001134	B	0.409481818	B	0.001146356	B	0.567770147	B
rs12003472	9	8752534	0.001679863		A	T					0.81617951	A	0.341462179	A		
rs12003472	9	8752534	0.000213411	-	A	T	0.120038278	A	0.70681809	A					0.770316391	B
rs10815933	9	8752705	2.75525E-07	+	C	T	0.102832253	A	0.912918147	A	0.341946257	A	0.838628235	A	0.650624186	A
rs10977287	9	8753836	2.75525E-07	+	C	T	0.897873726	B	0.192830113	B						
rs1010592	9	8756370	0.262100011													
rs12346008	9	8756570	0.296246363	+	C	T	0.296246363	A	0.499775769	B						
rs10511508	9	8757474	0.019842505	+	C	T					0.970687332	B	0.685321884	A		
rs16928415	9	8759557	0.019842505	-	C	T					0.142128547	A	0.019842505	B	0.879976381	A
rs7036354	9	8761855	0.061473559	-	A	G	0.332459388	B	0.808934516	A						
rs7021320	9	8761874	0.009185581													
rs2117327	9	8763383	0.009185581	-	C	G	0.009185581	A	0.529911852	A					0.62951088	B
rs2117328	9	8763404	0.054609999	+	G	T					0.52055461	A	0.329794195	B		
rs2117329	9	8763599	0.054609999	+	C	T					0.933608899	B	0.445689798	B		
rs1036327	9	8764025	0.080410004	-	A	G					0.174842796	B	0.472573194	B	0.656899535	B
rs1036327	9	8764025	7.02626E-05	-	A	G					0.650769759	B	0.205386898	A		
rs1036328	9	8764062	7.02626E-05	-	C	G	0.865690713	A	0.511169251	A	0.723134701	A	0.206783464	B	0.807332281	B
rs1036331	9	8764381	0.030005698	+	G	T					0.284843098	B	0.030005698	A	0.694390982	A
rs1036331	9	8764381	0.000366823	+	G	T									0.896551356	B
SNP_A-1995785	9	8765019	0.000366823	-	C	T					0.489963504	B	0.000366823	A	0.342239761	A
rs12350639	9	8765023	0.00154276	+	C	T	0.069094923	A	0.946367182	B						
rs7868093	9	8765087	0.00154276	+	A	T	0.010954642	B	0.748837795	B	0.422698736	B	0.702207061	A	0.586468702	A
rs10815939	9	8767234	0.127599999													
rs9299072	9	8767779	0.240600005													
rs10977298	9	8768606	0.240600005													
rs9299074	9	8769081	0.362286339	-	A	G					0.898469077	A	0.549257076	B		
rs10511509	9	8769297	0.201499999	-	C	G					0.551557822	A	0.582487583	A	0.362286339	A
rs10511509	9	8769297	0.192100003	-	C	G	0.47603736	B	0.86586231	B						
rs10815944	9	8770088	0.081749998													
rs1812782	9	8770202	0.019950001													
rs16928439	9	8770293	0.000166712													
rs17660536	9	8770604	0.000166712	+	A	G	0.007475991	A	0.393033934	B						
rs1549997	9	8771034	0.019292112													
rs1549999	9	8771457	0.019292112	+	A	G	0.506193938	A	0.746182959	B	0.142671622	A	0.977442691	A	0.289724664	A
rs1550000	9	8771871	0.028086091	+	C	T	0.028086091	A	0.548323853	B						
rs10739169	9	8774446	0.10748275	-	C	T	0.792360306	B	0.473712498	A	0.272130028	A	0.123895759	A	0.649959669	B
rs10977299	9	8774855	0.166525091	+	C	T	0.324713154	B	0.574397892	A	0.879533171	A	0.900042581	B	0.377084078	A
rs16928446	9	8775435	0.125499994	-	A	G	0.479346732	A	0.867278317	B	0.166525091	A	0.685620696	B		
rs13440123	9	8775993	0.051508868	+	A	G	0.809735847	A	0.569172209	B						
rs12376837	9	8776718	0.051508868	+	A	C	0.248493298	B	0.464673311	B	0.871821622	A	0.992186059	B	0.815631609	B
rs13283979	9	8776827	0.009767													
rs3802396	9	8777733	0.009767													
rs4742539	9	8781012	0.022023675	+	C	T	0.801767465	A	0.367665885	A						
rs12348514	9	8781981	0.022023675	+	G	T	0.379789465	A	0.271234946	A	0.869368154	A	0.805323725	A	0.511549545	A
rs12349492	9	8782107	0.057532332													
rs10815949	9	8783359	0	+	A	T	0.845127863	B	0.598372215	A	0.414505525	A	0.86186247	A	0.822839327	A
rs892502	9	8783834	0	-	A	G	0.874093988	B	0.663870577	A						
rs2082633	9	8784314	0.012024316	+	A	G	0.058021064	A	0.349709059	B	0.221387514	B	0.207410336	B	0.075460396	B
rs765800	9	8784775	0.004748192	+	A	G	0.509009901	A	0.357910002	B					0.183471638	A
rs7032107	9	8785072	0.004748192	-	G	T	0.547357943	B	0.255028178	A	0.716084917	A	0.963450597	A	0.616839258	B
rs12685836	9	8785581	0.01011	+	A	C					0.785631758	A	0.281137635	A		
rs12685836	9	8785581	0.01011	+	A	C	0.606539174	A	0.215763925	A						
rs1550004	9	8786449	0.168505383								0.890361245	A	0.168505383	A	0.757967771	A
rs1434275	9	8787473	0.059506394								0.761473063	A	0.793380084	A	0.772819902	A
rs1434276	9	8787533	0.059506394	-	A	G					0.522788529	A	0.859424512	B	0.059506394	B
rs12555779	9	8788076	0.08680733	-	A	T	0.596842226	B	0.63302962	B						
rs9299075	9	8788347	0.056282454													
rs1550003	9	8788767	0.056282454	+	C	T	0.353709065	B	0.697823143	B						
rs10123595	9	8789819	0.156100005													
rs9644892	9	8790078	0.01636057	+	A	G									0.593101398	B
rs12555236	9	8791225	0.01636057	-	A	G	0.749895878	B	0.279562217	B						
rs4255195	9	8795253	0.109081055	+	A	G	0.810450554	B	0.366513464	A						
rs4562389	9	8795462	0.028622588													
rs1636	9	8797814	0.028622588	+	A	C	0.033315215	B	0.931649237	A	0.086894236	B	0.367136208	A	0.676823474	A
rs6477355	9	8799042	0.094700001													
rs10739170	9	8799841	0.094700001	+	C	T	0.831985647	A	0.480763748	B						
rs12006129	9	8800008	0.094740003	-	C	T	0.114714725	B	0.352325107	A						
rs3802395	9	8800447	0.004546584													
rs7034293	9	8801105	0.004546584	+	C	G					0.004546584	B	0.850967735	A		
rs10123694	9	8801881	0.086006206	-	C	T					0.219327824	A	0.99051804	A		
rs10123694	9	8801881	0	-	C	T	0.086006206	A	0.701551271	B						
rs12352212	9	8802364	0	+	C	T	0.112919589	A	0.490343192	B						
rs10733549	9	8802415	0.007928876	-	A	G	0.802731712	B	0.629505487	A					0.723352303	B
rs7866522	9	8802704	0.007928876	-	G	T	0.066808491	B	0.444049771	B	0.839949513	B	0.948239391	A	0.007928876	A
rs7855611	9	8802794	0.046706839	-	A	C	0.539414399	A	0.046706839	A						
rs7855709	9	8802871	0.003293584	+	C	T	0.116746426	B	0.807855453	A	0.695444607	A	0.222266602	A	0.234456819	A
rs10739171	9	8802996	0.003293584	-	A	G	0.047055309	B	0.564246212	A						
rs10815955	9	8804324	0.038677191	-	C	G	0.181032805	A	0.295299989	B						
rs10815956	9	8805186	0.046362462		A	G					0.342222772	A	0.248811552	B		
rs10815958	9	8805390	0.046362462	+	A	T	0.292529833	B	0.081008761	B						
rs1897789	9	8805681	0.129099995	+	C	T	0.719658032	B	0.241130573	A						
rs16928477	9	8806305	2.87064E-05													
rs10815959	9	8806479	2.87064E-05	+	A	G	0.839881789	A	0.861770695	B	0.779742649	B	0.220381555	B	0.563437908	A
rs7872026	9	8806665	0.006457996	-	A	G	0.238006213	A	0.772244193	A	0.052233746	A	0.696781057	A	0.109105311	B
rs1434274	9	8807244	0.006457996	-	A	G					0.929320523	B	0.006457996	B	0.475006533	A
rs10511510	9	8807874	0	+	C	T					0.290430481	A	0.007357369	B	0.965558171	B
rs16928488	9	8812267	0	-	C	T	0.403997891	B	0.006988162	A						
rs10815962	9	8812716	0.002259341	+	C	G	0.199952985	B	0.517395248	A	0.859347896	A	0.632137045	B	0.09517999	A
rs7864670	9	8814433	0.002259341	-	A	G	0.6460525	B	0.306313966	B						
rs10815964	9	8816108	0.003975051													
rs1434254	9	8816278	0.003975051	-	A	G	0.82632734	A	0.862478029	B	0.84694591	B	0.336597878	A	0.985527099	A
rs10120501	9	8816767	0	-	A	G	0.404040098	A	0.675009189	A					0.583270758	B
rs7863174	9	8817680	0	-	C	T	0.307680227	A	0.878628987	B						

rs_id	taiw_P	taiw_ Phase	hm_dep_P	hm_dep_ Phase	eca_P	eca_ Phase	PS_P	PS_ Phase	BRN_P	BRN_ Phase	CNIII_PVAL	CNIII_ Phase	HM_P	HM_ Phase	LER_P	Lerman_ Phase	PIP_P	PIP_ Phase	R1_P	rose_ phase
rs1434270																				
rs7038493																				
rs7869843																				
rs7863593							0.308899999	A			0.823599994	B		B			0.132150758			
rs6477346	0.308488844	B	0.307555677	B	0.322561261	A	0.779500008	A	0.084315486	B	0.629000008	A	0.487029408	A	0.5408797	A	0.700774392	A	0.221165583	A
rs10815927																				
rs12338284							0.804400027	A			0.638199985	A					0.28619868	A		
rs10977277							0.838100016	B			0.801699996	B					0.421082404	A		
rs7861848							0.935599983	B			0.629000008	B		B			0.107802466			
rs720821																				
rs956154																				
rs956154	0.796456018	A	0.795052783	B	0.397090883	B	0.25029999	B	0.268739059	A	0.583500028	B	0.610727834	B	0.88866966	A	2.02122E-05	A		
rs10117781																				
rs10511507																				
rs10116682	0.347424333	B	0.821605648	A	0.396750405	A	0.627799988	A	0.270149637	A	0.629999995	B	0.395351412	A	0.365312776	B	0.464255523	A	0.513107815	A
rs12003472																			0.125466708	B
rs12003472	0.329924882	B	0.292509764	B	0.940330687	A	0.424400002	A	0.23179545	B	0.880599976	A	0.171643558	B	0.633892521	B	0.001679863			
rs10815933	0.430169436	A	0.208302863	B	0.879652699	B	0.373400003	A	0.271580238	B	0.880599976	A	0.271193292	B	0.278303627	A	0.000213411		0.244853924	B
rs10977287							0.958100021	A			0.454600006	A		B			2.76E-07			
rs1010592																				
rs12346008							0.700399995	B			0.629000008	A					0.94898179	A		
rs10511508																				
rs16928415	0.462578531	A	0.201156213	A	0.870247772	B			0.191540443	B			0.249362454	B	0.46396404	A			0.753195386	B
rs7036354							0.974500001	B			0.629000008	B		B			0.061473559			
rs7021320																				
rs2117327	0.588419333	B	0.729988181	B	0.734882557	B	0.450800002	A	0.410204095	A	0.694899976	A	0.635714405	B	0.265367224	A	0.02009382			
rs2117328																			0.195497381	B
rs2117329																			0.220375635	A
rs1036327																				
rs1036327																			0.222584205	A
rs1036328	0.504286055	A	0.901790187	B	0.644479998	A	0.264999986	A	0.577651062	B	0.929099977	B	0.558503991	B	0.823177203	B	7.02626E-05		0.135028453	B
rs1036331																				
rs1036331	0.602464038	B	0.938661571	B	0.619615272	B			0.783682998	B			0.661178592	B	0.981023229	A				
SNP_A-1995785	0.509323472	A	0.819976525	B	0.031273795	A			0.924188874	A			0.30856083	A	0.128278994	B			0.395973587	A
rs12350639							0.89289999	A			0.832799971	B					0.020591913	A		
rs7868093	0.736394622	A	0.82508972	A	0.926181394	B	0.575100005	B	0.379881141	A	0.796400011	B	0.114248492	A	0.757755195	A	0.00154276	A	0.459693835	A
rs10815939																				
rs9299072																				
rs10977298																				
rs9299074																				
rs10511509																				
rs10511509							0.2421	A			0.201499999	A		B			0.422148928			
rs10815944																				
rs1812782																				
rs16928439																				
rs17660536							0.898800015	B			0.222100005	B					0.000166712	A		
rs1549997																				
rs1549999	0.757608432	B	0.113744783	B	0.493053674	A	0.665400028	A	0.25780844	A	0.1052	A	0.426971543	B	0.593046348	A	0.019292112		0.277107881	A
rs1550000							0.939400017	B			0.1052	B					0.260072365	A		
rs10739169	0.276302917	A	0.589460895	B	0.55648923	B	0.937600017	A	0.315274621	A	0.118799999	B	0.520124754	A	0.267645035	A	0.161723527	A	0.146746588	B
rs10977299	0.695803281	B	0.671785296	A	0.575157662	B	0.298099995	B	0.326122759	B	0.273200005	A	0.783774868	B	0.900014398	A	0.559571081		0.310405996	A
rs16928446			0.214740255	A	0.238785905	A	0.703100026	A	0.200204548	A	0.966700018	A	0.491653942	B	0.268764445	B	0.539448492		0.518810902	B
rs13440123							0.429899991	A			0.638199985	A					0.200965935	A		
rs12376837	0.25486957	B	0.243836306	A	0.57444419	B	0.402399987	B	0.401512618	B	0.169499993	A	0.634860622	B	0.265053402	B	0.739344727		0.998355209	B
rs13283979																				
rs3802396																				
rs4742539							0.503600001	B			0.114500001	A		B			0.405001643			
rs12348514	0.281144014	B	0.072379868	B	0.686707728	B	0.351300001	A	0.022023675	B	0.306400001	A	0.324931458	B	0.276780262	A	0.105787838	A	0.776937047	A
rs12349492																				
rs10815949	0.407997072	B	0.864592073	A	0.791161481	B	0.315400004	B	0.137295557	B	0.1171	A	0.057532332	B	0.50906294	A	0.626968395		0.285110972	A
rs892502							0.953700006	B			0	A					0.594527608	A		
rs2082633	0.247159957	B	0.950772254	A	0.686774177	B	0.314500004	A	0.69990627	B	0.680499971	B	0.888835606	B	0.038484972	B	0.030604437		0.528646132	B
rs765800	0.963400081	B	0.012024316	A	0.868620456	B	0.926999986	A	0.139560805	B	0.433600009	A	0.522135267	B	0.883263667	B	0.091431807			
rs7032107	0.264073145	A	0.220746399	B	0.910962907	B	0.90899998	A	0.004748192	A	0.177300006	B	0.446806342	A	0.26774761	A	0.971294924	A	0.603833214	B
rs12685836																			0.308655446	A
rs12685836							0.781499982	B			0.580900013	B					0.504907801	A		
rs1550004																				
rs1434275																				
rs1434276																				
rs12555779							0.589399993	B			0.715499997	B		B			0.08680733			
rs9299075																				
rs1550003							0.895699978	B			0.289200008	A		B			0.056282454			
rs10123595																				
rs9644892	0.485665125	A	0.957378469	B	0.80226708	A			0.492575994	A			0.221847915	A	0.644686001	B				
rs12555236							0.233099997	A			0.2861	A					0.01636057	A		
rs4255195							0.140499994	A			0.467999995	B					0.109081055	A		
rs4562389																				
rs1636	0.095219181	A	0.353779614	A	0.809751922	B	0.94660002	B	0.028622588	A	0.420700014	B	0.427019771	B	0.085942143	A	0.133893286	A	0.259752098	B
rs6477355																				
rs10739170							0.389499992	A			0.094700001	A					0.949927965	A		
rs12006129							0.795400024	B			0.133200005	B		B			0.431874232			
rs3802395																				
rs7034293																			0.578266557	B
rs10123694																			0.18868531	A
rs10123694							0.789799988	A			0.131099999	A		B			0.521868337			
rs12352212							0.945500016	A			0	B		B			0.178511434			
rs10733549	0.219770369	B	0.861167993	A	0.217474436	B	0.031849999	A	0.586744339	A	0.061020002	A	0.739327415	B	0.112028595	A	0.846345141			
rs7866522	0.070926226	A	0.31944574	A	0.670758873	A	0.750999987	B	0.291486314	A	0.096380003	B	0.668877953	B	0.918166291	A	0.10653397	A	0.083689165	B
rs7855611							0.224900007	A			0.496800005	B					0.217001213	A		
rs7855709	0.342649224	A	0.340755529	A	0.820992743	A	0.513999999	B	0.762069643	A	0.069190003	B	0.097168345	B	0.50698142	A	0.528529057	A	0.352165951	B
rs10739171							0.533100009	A			0.104800001	B					0.003293584	A		
rs10815955							0.582799971	B			0.91109997	B					0.038677191	A		
rs10815956																			0.506464731	A
rs10815958							0.774699986	A			0.898599982	B					0.046362462	A		
rs1897789							0.684000015	A			0.129099995	A					0.260498358	A		
rs16928477																				
rs10815959	0.880544382	B	0.436751438	B	0.88139639	A	0.249699995	A	0.797658975	B	0.149900004	A	0.588159783	B	0.868828168	A	2.87064E-05		0.997148655	B
rs7872026	0.086231043	A	0.194461599	A	0.776862232	B	0.084799998	B	0.545974157	A	0.02978	B	0.149002066	A	0.498458951	A	0.148708495	A	0.575302705	A
rs1434274																				
rs10511510																				
rs16928488							0.851499975	A			0	B		B			0.692518202			
rs10815962	0.373895887	B	0.681993658	B	0.148456758	B	0.570900023	B	0.20868197	B	0.91109997	A	0.448096192	B	0.729158667	A	0.786742264		0.634145439	A
rs7864670							0.879400015	A			0.342799991	A		B			0.002259341			
rs10815964																				
rs1434254	0.815321269	B	0.074665842	B	0.789370844	B	0.118000001	A	0.003975051	A	0.042610001	A	0.009166114	B	0.433218638	B	0.015850925		0.769507686	B
rs10120501	0.137340855	A	0.710928925	A	0.411113605	A	0.135199994	B	0.379383653	B	0.042610001	B	0.071156531	A	0.660609556	A	0.067730361	A		
rs7863174							0.238800004	B			0	B		B			0.497568975			

rs_id	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_ Phase	SAGE_EA_ COC_pval	SAGE_EA_ COC_phase	SAGE_WH_ ALC_pval	SAGE_WH_ ALC_phase	SAGE_AA_ COC_pval	SAGE_AA_ COC_phase	SAGE_BL_ ALC_pval	SAGE_BL_ ALC_phase	Treut_pval	Treut_ phase	IlmnStrand	ACTG
rs1434270																
rs7038493					0.611100018	G	0.991299987	G	0.785899997	A	0.368400008	A			Top	(A/G)
rs7869843					0.780499995	G	0.97210002	A	0.682799995	A	0.242200002	A			Bot	(T/C)
rs7863593	0.921899974		0.548811381	B												
rs6477346	1		0.303442945	A												
rs10815927					0.128999993	T	0.008301	T	0.062440001	C	0.194499999	C	0.808200002	C	Bot	(T/C)
rs12338284	0.726599991		0.735023442	B												
rs10977277	0.281800002		0.87683386	B												
rs7861848	0.539399982		0.942133809	A												
rs720821																
rs956154					0.119099997	A	0.028030001	A	0.176599994	C	0.01505	C	0.938799977	A	Bot	(T/G)
rs956154	0.697600007		0.800596949	A	0.119099997	A	0.028030001	A	0.176599994	C	0.01505	C	0.938799977	A	Bot	(T/G)
rs10117781					0.778199971	A	0.956499994	C	0.750100017	C	0.299600005	C			Top	(A/C)
rs10511507																
rs10116682	0.559400022		0.271362321	A												
rs12003472																
rs12003472	0.921999991		0.40650008	B												
rs10815933	0.922299981		0.5844075	B												
rs10977287	0.126900002		0.66079665	B												
rs1010592					0.861400008	G	0.974500001	A	0.620400012	A	0.262100011	A			Bot	(T/C)
rs12346008	1		0.899961259	B												
rs10511508																
rs16928415					0.861400008	G	0.974500001	A	0.148499996	A	0.050960001	A			Top	(A/G)
rs7036354	1		0.684189617	A												
rs7021320					0.861400008	C	0.974500001	A	0.303200007	A	0.103799999	A			BOT	(T/G)
rs2117327	0.76880002		0.951324593	B												
rs2117328																
rs2117329					0.154499993	C	0.079870001	C	0.274399996	T	0.054609999	T	0.625899971	C	Bot	(T/C)
rs1036327					0.252299994	T	0.080410004	T	0.5079	C	0.377999991	C	0.773699999	T	Top	(A/G)
rs1036327					0.252299994	T	0.080410004	T	0.5079	C	0.377999991	C	0.773699999	T	Top	(A/G)
rs1036328	1		0.809418076	B												
rs1036331																
rs1036331																
SNP_A-1995785																
rs12350639	0.417699993		0.904469021	A												
rs7868093	0.921899974		0.662005145	B												
rs10815939					0.629000008	T	0.170100004	T	0.253800005	C	0.127599999	C			Top	(A/G)
rs9299072					0.966499984	G	0.412999988	G	0.933499992	T	0.717100024	T	0.619499981	G	Top	(A/C)
rs10977298					0.63319999	C	0.253199995	C	0.606100023	T	0.240600005	T	0.640699983	T	Top	(A/G)
rs9299074																
rs10511509																
rs10511509	0.64349997		0.492234842	B												
rs10815944					0.584999979	T	0.192100003	T	0.980199993	T	0.397700012	G	0.678200007	G	Bot	(T/G)
rs1812782					0.355199993	G	0.420700014	G	0.081749998	T	0.139400005	T	0.264200002	G	Top	(A/C)
rs16928439					0.721899986	T	0.019950001	T	0.333499998	C	0.148800001	C			TOP	(A/G)
rs17660536	0.376899988		0.548797024	A												
rs1549997					0.940599978	C	0.448000014	C	0.647499979	A	0.514400005	A	0.651300013	C	Top	(A/C)
rs1549999	0.304100007		0.570333474	A												
rs1550000	0.64139998		0.533405668	B												
rs10739169	0.775099993		0.10748275	B	0.413599998	G	0.870899975	A	0.216600001	G	0.383899987	G	0.74970001	A	Bot	(T/C)
rs10977299	0.927600026		0.962644112	A												
rs16928446	0.382600009		0.565770746	B												
rs13440123	0.512899995		0.354809581	B	0.474900007	A	0.506699979	G	0.125499994	A	0.240899995	A			Top	(A/G)
rs12376837	0.699100018		0.051508868	A												
rs13283979					0.078380004	A	0.06566	A	0.666599989	A	0.66960001	A	0.216999993	G	Top	(A/G)
rs3802396					0.009767	A	0.051150002	A	0.31130001	A	0.131999999	A	0.97149998	A	Top	(A/G)
rs4742539	0.85710001		0.761669792	B												
rs12348514	0.882099986		0.956242852	B	0.319700003	T	0.052850001	T	0.898400009	G	0.762099981	T	0.325899988	G	Bot	(T/G)
rs12349492									0.659099996	A	0.502600014	A			Top	(A/G)
rs10815949	0.787500024		0.910771297	A												
rs892502	1		0.644392382	B												
rs2082633	0.734799981		0.378215374	A	0.384000003	G	0.788999975	A	0.346100003	G	0.1655	G	0.399599999	G	Top	(A/G)
rs765800	0.268099994		0.167041156	A	0.366400003	C	0.583299995	C	0.789499998	C	0.962499976	C			TOP	(A/G)
rs7032107	0.629400015		0.416163663	B												
rs12685836					0.01011	A	0.123099998	A	0.634599984	C	0.618200004	C			Top	(A/C)
rs12685836	0.500500023		0.288605154	B	0.01011	A	0.123099998	A	0.634599984	C	0.618200004	C			Top	(A/C)
rs1550004					0.320300013	C	0.828400016	C	0.79400003	C	0.693700016	C	0.638899982	C	Top	(A/G)
rs1434275																
rs1434276					0.233099997	C	0.2861	C	0.708800018	C	0.618600011	C	0.534300029	C	Bot	(T/C)
rs12555779	0.261200011		0.978646012	B												
rs9299075					0.439799994	A	0.927299976	G	0.502300024	G	0.124499999	G	0.900099993	G	Bot	(T/C)
rs1550003	1		0.637537846	B												
rs10123595					0.5704	T	0.708000004	T	0.296900004	C	0.583599985	C	0.916499972	T	Top	(A/G)
rs9644892					0.93720001	G	0.738200009	A	0.432099998	G	0.156100005	G	0.231299996	G	Bot	(T/C)
rs12555236	0.546899974		0.772054539	B												
rs4255195	0.691799998		0.503692616	B												
rs4562389					0.635200024	T	0.960399985	T	0.541899979	T	0.133900002	T	0.784500003	C	Top	(A/G)
rs1636	0.535600007		0.745860512	B												
rs6477355					0.193800002	A	0.719399989	A	0.660099983	A	0.194700003	A			Top	(A/G)
rs10739170	0.356700003		0.668055128	A												
rs12006129	0.583100021		0.358729211	A					0.622900009	G	0.739400029	G			Top	(A/G)
rs3802395					0.1734	T	0.681800008	T	0.094740003	C	0.421700001	C	0.711700022	C	Bot	(T/C)
rs7034293																
rs10123694																
rs10123694	0.546800017		0.663714275	A												
rs12352212	1		0.138848718	B												
rs10733549	1		0.735476922	B	0.188600004	C	0.188999996	C	0.243399993	T	0.678200007	T	0.797999978	T	Top	(A/G)
rs7866522	0.548399985		0.534834143	B	0.339399993	C	0.639500022	C	0.105899997	A	0.554099977	A			TOP	(A/C)
rs7855611	0.613699973		0.546797234	A												
rs7855709	0.224000007		0.994683203	B	0.3028	C	0.376599997	C	0.05957	T	0.186299995	T			TOP	(A/G)
rs10739171	0.673799992		0.473976354	A												
rs10815955	0.897000015		0.814297585	A												
rs10815956					0.7403	G	0.605599999	G	0.449200004	A	0.701799989	G	0.736199975	G	Bot	(T/C)
rs10815958	0.897000015		0.921981564	A												
rs1897789	0.898999989		0.481785222	B												
rs16928477									0.596800029	T	0.709599972	C			TOP	(A/G)
rs10815959	0.779500008		0.998142653	A	0.363000006	A	0.935199976	A	0.665499985	A	0.75120002	G			BOT	(T/C)
rs7872026	0.924700022		0.975516824	B												
rs1434274					0.408699989	T	0.964699984	C	0.414299995	T	0.485100001	T	0.506299973	C	Top	(A/G)
rs10511510					0.441000015	G	0.987100005	A	0.872799993	A	0.975099981	G	0.49180001	A	Bot	(T/C)
rs16928488	1		0.23840142	B					0.459300011	A	0.669099987	A			TOP	(A/G)
rs10815962	0.797699988		0.954044232	B												
rs7864670	0.518299997		0.553429731	A												
rs10815964					0.49880001	A	0.751699984	A	0.708000004	G	0.936800003	A			Top	(A/G)
rs1434254	0.924600005		0.764210517	A												
rs10120501	0.653699994		0.842895092	B												
rs7863174	1		0.419016655	B												

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Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase
rs10977313	9	8818849	0.020459975											
rs2099406	9	8819043	0.020459975	+	C	G	0.978896568	A	0.631387282	B	0.291163075	B	0.193835246	B
rs4372066	9	8819149	0.022828101	-	C	T					0.407313449	A	0.76777246	A
rs4372066	9	8819149	0.022828101	-	C	T	0.620168299	A	0.404436983	A				
rs10815967	9	8819390	0.178200007											
rs10758997	9	8819567	0.001005337											
rs1434256	9	8820796	0.001005337	+	C	T	0.903386063	A	0.50386511	A	0.79655442	A	0.607220985	A
rs1434258	9	8820857	0.017218744	-	A	G	0.86803323	B	0.255122379	B				
rs7030557	9	8821995	0.590399981											
rs11791648	9	8822025	0.437599987											
rs7048621	9	8822038	0.065799093											
rs1550001	9	8825388	0.064905651	-	C	T	0.345786586	B	0.288759744	A				
rs10124428	9	8826283	0.064905651	+	C	T	0.064905651	B	0.464026811	B	0.797073133	B	0.458733791	B
rs2570299	9	8830840	0.09014											
rs10977318	9	8833207	0.020137266	-	G	T	0.113841077	B	0.516420804	A				
rs7042203	9	8833363	0.020137266	+	C	G	0.534190162	B	0.240962137	A	0.76945354	B	0.73483336	B
rs2570306	9	8833382	0.000589645	+	C	G	0.301323736	A	0.33384926	B	0.488388844	A	0.562695826	B
rs7870329	9	8833506	0.000589645	-	C	G	0.000589645	B	0.372317714	B	0.000971192	B	0.683941082	B
rs2381904	9	8835177	0.149822826											
rs2570961	9	8835429	0.111500002	+	A	G	0.473706166	A	0.623173289	A				
rs1865343	9	8835598	0.017246686											
rs1865341	9	8835911	0.017246686	+	C	T	0.655828204	A	0.579914259	B				
rs2570960	9	8836052	0.056049999											
rs2814723	9	8836151	0.020595751											
rs2814722	9	8836218	0.003334228	+	C	T	0.020595751	A	0.318124448	B				
rs1975198	9	8836506	0.003334228	-	C	T	0.003334228	B	0.278026369	B				
rs1975197	9	8836955	0.028025827	-	C	T	0.458137501	A	0.028025827	B	0.49059901	B	0.417846853	B
rs2117099	9	8837233	0.1237											
rs1972797	9	8837353	0.016696981											
rs12685098	9	8839933	0.016696981	-	C	T	0.459224323	B	0.016696981	B				
rs2814717	9	8840071	0.079882628	-	C	T	0.207637128	A	0.103255374	B				
rs10123580	9	8840237	0.079882628	-	A	G	0.768470502	B	0.079882628	A	0.824805398	B	0.790692789	A
rs10759003	9	8841012	0.102600001											
rs2570301	9	8842226	0.291999996											
rs3891649	9	8843690	0.318199992											
rs7466280	9	8844069	0.055671006											
rs10815976	9	8844489	0.000430649	-	A	C	0.057148761	B	0.163201985	A	0.923951961	B	0.483441205	B
rs10759006	9	8845603	0.000430649	+	C	T	0.995034872	B	0.163078032	A				
rs749947	9	8846032	0.03562											
rs751372	9	8846908	0.018331906											
rs10815977	9	8850355	0.018331906	+	A	G	0.442335399	B	0.998969994	A				
rs12236086	9	8852724	0.01325	-	C	G	0.775771118	B	0.935782327	B				
rs10977327	9	8855925	0.01325	+	A	G	0.268012558	A	0.487827745	A				
rs723145	9	8857519	0.105700001											
rs2217711	9	8858177	0.085749999	-	A	G					0.135978489	B	0.84816357	B
rs1368686	9	8858684	0.04654											
rs10815979	9	8858774	0.04654											
rs12002381	9	8860553	0.035344248											
rs13284598	9	8861342	0.035344248	+	C	G	0.288580284	A	0.934465928	B				
rs10759008	9	8863348	0.008162											
rs10759009	9	8863449	0.008162											
rs10759010	9	8863659	0.000765788	+	C	T	0.619844256	A	0.626823499	A	0.300362455	B	0.873902169	B
rs10759011	9	8863732	0.000765788	-	A	G					0.051100085	A	0.590018541	B
rs10759011	9	8863732	0.001854143	-	A	G	0.601832988	B	0.72990237	B				
rs10739174	9	8863866	0.001854143	+	C	T	0.737128941	B	0.565010726	A	0.705283461	A	0.03391337	B
rs10815980	9	8864275	0.019260109	-	A	T					0.019260109	A	0.28868746	B
rs10977328	9	8864593	0.071155085	-	C	G					0.223398699	B	0.071155085	A
rs10977328	9	8864593	0.110543125	-	C	G	0.281544479	A	0.957044856	B				
rs10759012	9	8864611	0.174099997	-	G	T					0.890130638	A	0.929317145	A
rs10759012	9	8864611	0.174099997	-	G	T	0.628880534	B	0.385964512	A				
rs10759013	9	8865954	0.343699992											
rs7028784	9	8867467	0.2236											
rs12000930	9	8867814	0.148499996											
rs17584499	9	8869118	0.148499996											
rs7023424	9	8869472	0.188099995											
rs10815983	9	8871741	0.188099995											
rs13287579	9	8874015	0.133699998											
rs10815984	9	8874844	0.013563366											
rs10815985	9	8875088	0.013563366	+	C	G	0.287097923	B	0.21316126	A	0.759968132	A	0.446505888	A
rs10815986	9	8875169	0.03125557	+	A	G					0.629035405	A	0.186166597	B
rs10815986	9	8875169	0.002799101	+	A	G	0.03125557	A	0.730022867	B				
rs13295511	9	8875226	0.002799101	+	A	C	0.226193925	B	0.253101721	B				
rs13295870	9	8875459	0.002822034	-	G	T	0.31806996	A	0.121031698	A				
rs10759014	9	8875476	0.012110722											
rs10511512	9	8879419	0.012110722	+	A	C					0.153427148	B	0.012110722	A
rs2890841	9	8880725	0.276899993											
rs7867067	9	8880946	0.341199994											
rs10815989	9	8881463	0.008524653											
rs7850165	9	8883834	0.000127232	+	A	G	0.018591388	B	0.976328636	A	0.040992101	B	0.343178534	B
rs7853293	9	8884013	0.000127232	+	A	G	0.582330841	A	0.351346809	B				
rs10977337	9	8884070	0.036510625											
rs2196066	9	8884910	0.036510625	+	A	C	0.920358896	B	0.455683679	B				
rs1368680	9	8885687	0.044670001											
rs7861793	9	8886296	0.077922901	-	C	G	0.879581294	A	0.119361034	B				
rs7866753	9	8887215	0.077922901	-	A	G	0.208869464	A	0.472948655	B				
rs6477360	9	8887230	0.075560004	-	A	G					0.711978851	B	0.155613884	A
rs6477360	9	8887230	0.075560004	-	A	G	0.876576377	B	0.961397818	B				
rs11794550	9	8887676	0.069169998											
rs1433541	9	8888464	0.04166											
rs10977342	9	8888682	0	-	A	G	0.987381141	A	0.771240624	B				
rs16928589	9	8889516	0	+	A	C	0.753401432	A	0.155636176	B				
rs10511511	9	8890067	0.047090865	+	C	T					0.167440072	B	0.178587317	B
rs10511511	9	8890067	0.022539999	+	C	T	0.75320639	A	0.958955314	B				
rs7856948	9	8890641	0.022539999											
rs7857074	9	8890722	0.048269998											
rs17585256	9	8891157	0.031490002											
rs10815990	9	8891739	0.031490002	-	C	T	0.988875886	A	0.498436229	B				
rs1897671	9	8891758	0.114100002	+	C	G					0.176344129	A	0.815091076	A
rs1897671	9	8891758	0.114100002	+	C	G	0.820445886	B	0.306036588	B				
rs976385	9	8891884	0.021312004	+	A	C	0.476181381	A	0.759193014	B				
rs10815991	9	8892033	0.021312004	+	C	G	0.344837369	B	0.442787712	B	0.314544943	A	0.078406855	A
rs10977348	9	8893357	0.023292409	-	A	G	0.52643528	A	0.888945355	A	0.361114566	A	0.334798776	A
rs9408748	9	8893431	0.017750001	-	C	T	0.480001601	A	0.589556689	B				
rs1019955	9	8893857	0.013042046	-	A	G					0.131161461	B	0.025655323	A
rs1019955	9	8893857	0	-	A	G	0.582549855	A	0.453497623	A				
rs7032026	9	8893936	0	+	A	T	0.293204975	A	0.657355674	A				
rs10759016	9	8896136	0.116999999											

rs_id	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase
rs10977313																		
rs2099406	0.020459975	A	0.033238065	A	0.443601188	B	0.634618084	B	0.534699976	A	0.556799796	A	0.251100004	A	0.090693115	B	0.509819841	A
rs4372066																		
rs4372066									0.284099996	B			0.362899989	B				
rs10815967																		
rs10758997																		
rs1434256	0.796908915	B	0.444179827	B	0.457298319	A	0.509344693	A	0.801100016	B	0.047605591	B	0.246800005	B	0.19485613	A	0.986413325	A
rs1434258									0.522199988	A			0.251100004	A		B		
rs7030557																		
rs11791648																		
rs7048621																		
rs1550001									0.356900007	A			0.181600004	A		B		
rs10124428	0.34818573	A	0.760448058	A	0.943514479	B	0.765225769	B	0.869300008	B	0.302365171	A	0.202700004	A	0.137319037	B	0.904049492	A
rs2570299																		
rs10977318									0.811999977	A			0.09014	A		B		
rs7042203	0.988375069	A	0.584481995	B	0.581260031	B	0.020137266	B	0.87349999	B	0.103058995	B	0.824699998	A	0.458310695	B	0.409536114	A
rs2570306	0.9851135	A	0.586246652	B	0.881552243	B	0.325242699	B	0.64230001	B	0.675188736	B	0.790600002	B	0.464892984	A	0.221556142	B
rs7870329					0.98504109	B	0.645644605	B	0.921400011	B	0.770993827	A	0.998300016	B	0.6163359	B	0.190875791	A
rs2381904																		
rs2570961									0.549700022	A			0.452300012	A				
rs1865343																		
rs1865341									0.286799997	B			0.790600002	B				
rs2570960																		
rs2814723																		
rs2814722									0.196799994	B			0.123400003	B		B		
rs1975198									0.762499988	A			0.065710001	A				
rs1975197	0.240082383	A	0.838246375	A	0.776346655	B	0.534829633	B	0.430299997	A	0.158121369	A	0.073229998	A	0.990397234	B	0.791822189	B
rs2117099																		
rs1972797																		
rs12685098									0.752300024	A			0.030990001	A		B		
rs2814717									0.312700003	B			0.910300016	A				
rs10123580	0.289880115	A	0.622706915	A	0.466777879	B	0.775782036	B	0.774800003	B	0.33408019	B	0.600799978	A	0.713419994	B	0.734466887	A
rs10759003																		
rs2570301																		
rs3891649																		
rs7466280																		
rs10815976	0.915792754	B	0.465385747	A	0.348583113	B	0.271479413	B	0.936699987	B	0.814581252	B	0.788699985	A	0.980106014	B	0.699285417	A
rs10759006									0.796199977	B			0.020889999	B				
rs749947																		
rs751372																		
rs10815977									0.884000003	B			0.624899983	A		B		
rs12236086									0.756200016	B			0.351599991	A		B		
rs10977327									0.48300001	B			0.869199991	A				
rs723145																		
rs2217711	0.766800528	B																
rs1368686																		
rs10815979																		
rs12002381																		
rs13284598													0.383100003	B		B		
rs10759008																		
rs10759009																		
rs10759010	0.597223066	A	0.140717044	A	0.637746642	B	0.212174794	A	0.847899973	A	0.106522628	A	0.61500001	A	0.328377933	A	0.887278146	B
rs10759011																		
rs10759011	0.615882092	A	0.178924522	B	0.512715499	A	0.343760771	B	0.847899973	B	0.692447858	B	0.61500001	B	0.449658412	B	0.996330516	B
rs10739174	0.873193812	B	0.95011471	B	0.133390481	B	0.261954848	B	0.564899981	A	0.828287017	A	0.814599991	B	0.681959612	B	0.466480027	B
rs10815980																		
rs10977328																		
rs10977328	0.500501424	B	0.297882737	A	0.110543125	A	0.240004426	A	0.532700002	A	0.94046402	B	0.61500001	A	0.690660402	B	0.710535568	B
rs10759012																		
rs10759012									0.174099997	B			0.614199996	B				
rs10759013																		
rs7028784																		
rs12000930																		
rs17584499																		
rs7023424																		
rs10815983																		
rs13287579																		
rs10815984																		
rs10815985	0.808999139	A	0.013563366	A	0.983379924	A	0.594208573	A	0.703100026	B	0.899880334	A	0.038419999	A	0.470853012	B	0.89300949	B
rs10815986																		
rs10815986					0.463306476	A	0.551579162	B	0.646099985	B	0.966947824	A	0.801800013	B	0.991239988	A	0.243963224	A
rs13295511									0.267800003	A			0.376100004	A				
rs13295870									0.388300002	B			0.376100004	B		B		
rs10759014																		
rs10511512	0.079317106	A																
rs2890841																		
rs7867067																		
rs10815989																		
rs7850165	0.737415214	A	0.040542432	B	0.785460011	A	0.5322482	A	0.599799991	A	0.514446386	B	0.038419999	B	0.861941467	A	0.86925647	B
rs7853293									0.333600014	A			0.803200007	B				
rs10977337																		
rs2196066									0.75849998	B			0.887000024	B				
rs1368680																		
rs7861793									0.772800028	A			0.289200008	B				
rs7866753									0.096790001	B			0.968400002	B		B		
rs6477360	0.4225902	B																
rs6477360	0.515843576	B	0.810194485	B	0.742860903	B	0.121984566	B	0.075560004	A	0.698274515	A	0.806800008	A	0.188064411	B	0.457047152	B
rs11794550																		
rs1433541																		
rs10977342									0.04166	B			0.304500014	A				
rs16928589					0.389938993	B	0.41569744	A	0.00154	B	0.407942331	B	0	A	0.938869552	A	0.024234391	B
rs10511511	0.476462917	A																
rs10511511	0.103068811	A	0.847908113	B	0.047090865	A	0.907648072	A	0.1602	A	0.792512892	B	0.203299999	B	0.977649179	B	0.703358291	B
rs7856948																		
rs7857074																		
rs17585256																		
rs10815990									0.031490002	B			0.862999976	A		B		
rs1897671	0.62805658	B																
rs1897671									0.404900014	A			0.114100002	A				
rs976385									0.458600014	B			0.171599999	B				
rs10815991	0.297521811	B	0.203646103	B	0.342945578	B	0.021312004	A	0.632600009	B	0.791051166	A	0.206599996	A	0.623860868	B	0.779232147	B
rs10977348	0.500548293	B	0.55280893	B	0.36261616	B	0.423201571	B	0.270900011	A	0.786365021	A	0.995999992	A	0.023292409	B	0.62199837	B
rs9408748									0.165099993	A			0.995999992	A		B		
rs1019955																		
rs1019955	0.691324982	A	0.31997439	A	0.768221399	A	0.850685646	B	0.658100009	A	0.89970217	B	0.203299999	B	0.013042046	B	0.07954845	B
rs7032026									0.643100023	A			0	B		B		
rs10759016																		

rs_id	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs10977313									0.877200007	G	0.40290001	G	0.298999995	G	0.4384	G	0.459699988	G	Bot	(T/G)
rs2099406	0.081181108		0.576470874	B	0.468199998		0.908179569	B												
rs4372066			0.981547151	A																
rs4372066	0.022828101	A			0.717100024		0.946431698	B												
rs10815967									0.817300022	C	0.593299985	C	0.792900026	A	0.456499994	C	0.855199993	A	Top	(A/C)
rs10758997									0.393700004	T	0.499000013	T	0.592000008	T	0.178200007	T	0.444499999	C	Top	(A/G)
rs1434256	0.001005337	A	0.661562604	A	0.651899993		0.455640966	B	0.400400013	T	0.5449	T	0.857800007	T	0.579299986	T	0.432000011	C	Top	(A/G)
rs1434258	0.017218744				0.717999995		0.744763066	A												
rs7030557									0.915499985	A	0.649500012	A	0.796599984	A	0.739199996	G			Bot	(T/C)
rs11791648									0.782000005	G	0.954999983	G	0.952400029	A	0.590399981	G			BOT	(T/C)
rs7048621									0.437599987	T	0.751900017	T	0.926599979	T	0.474599987	T	0.487199992	C	Top	(A/G)
rs1550001	0.065799093				0.898999989		0.475321658	B												
rs10124428	0.10936433		0.875104433	B	0.85650003		0.864643678	B												
rs2570299									0.203999996	G	0.324800015	G	0.789499998	A	0.872500002	A			Bot	(T/C)
rs10977318	0.797857351				0.389899999		0.161248085	B												
rs7042203	0.948664015		0.902668358	A	1		0.568575875	B												
rs2570306	0.15235448	A	0.238143695	B	0.915700018		0.646884872	A												
rs7870329	0.07592433		0.682709794	B	0.417100012		0.610112874	A												
rs2381904									0.837700009	A	0.812099993	A	0.449800015	A	0.151199997	A	0.478300005	A	Top	(A/C)
rs2570961	0.149822826	A			0.54519999		0.242492236	B	0.630200028	T	0.932299972	T	0.571699977	T	0.912100017	T	0.976599991	T	Top	(A/G)
rs1865343									0.369899988	C	0.7421	C	0.483200014	T	0.3222	T	0.111500002	T	Top	(A/G)
rs1865341	0.017246686	A			0.915700018		0.95451117	A	0.418599993	A	0.844200015	A	0.559599996	G	0.856599987	G			Bot	(T/C)
rs2570960									0.363900006	C	0.993900001	C	0.211300001	T	0.246199995	T	0.056049999	T	Bot	(T/C)
rs2814723									0.3838	C	0.797900021	C	0.554799974	T	0.779200018	T			TOP	(A/G)
rs2814722	0.287247188				0.762600005		0.713416079	A												
rs1975198	0.413101493	A			0.904699981		0.470134777	B												
rs1975197	0.925932841		0.085899636	B	0.905799985		0.863877809	A	0.853500009	C	0.777100027	C	0.161699995	C	0.223000005	C	0.140400007	C	Top	(A/G)
rs2117099									0.1237	T	0.176699996	T	0.852999985	T	0.908699989	C			Top	(A/G)
rs1972797									0.78490001	T	0.94630003	T	0.549399972	T	0.76700002	T			Top	(A/C)
rs12685098	0.529831214				0.905099988		0.919768122	B												
rs2814717	0.36018148	A			0.404100001		0.545330159	A	0.787800014	A	0.774500012	G	0.899200022	A	0.881600022	A	0.396200001	G	Bot	(T/C)
rs10123580	0.356487904		0.415195004	B	0.667699993		0.217616266	B	0.509599984	T	0.848699987	T	0.964900017	T	0.770500004	T	0.926699996	T	Bot	(T/C)
rs10759003									0.102600001	A	0.265500009	A					0.931599975	A	Bot	(T/C)
rs2570301									0.596000016	T	0.505800009	T	0.291999996	T	0.385800004	T			Top	(A/G)
rs3891649									0.318199992	T	0.320899993	T	0.5	T	0.42050001	T	0.537999988	T	Bot	(T/C)
rs7466280									0.44780001	A	0.885200024	G	0.87620002	A	0.776899993	G	0.585300028	G	Bot	(T/C)
rs10815976	0.055671006	A	0.213003088	B	0.410899997		0.438459787	B	0.247700006	T	0.639299989	T	0.133399993	G	0.092890002	G			Top	(A/C)
rs10759006	0.000430649	A			0.128099993		0.968673919	A												
rs749947													0.03562	G	0.206300005	G			Bot	(T/C)
rs751372									0.346700013	G	0.394600004	G	0.61680001	A	0.341399998	A	0.625500023	A	Bot	(T/C)
rs10815977	0.018331906				0.087980002	B	0.804701084	B	0.128900006	G	0.077600002	G	0.236000001	G	0.118699998	G	0.626100004	G	Top	(A/G)
rs12236086	0.02486958				0.04307		0.478687858	B												
rs10977327	0.18999911	A			0.289999992		0.347935545	B	0.033009999	A	0.080090001	A	0.01325	G	0.02452	G	0.334300011	G	Top	(A/G)
rs723145									0.774100006	C	0.772599995	T	0.794099987	T	0.612800002	T	0.105700001	T	Top	(A/G)
rs2217711									0.434899986	G	0.802900016	G	0.349999994	G	0.769999981	G			Top	(A/G)
rs1368686									0.100599997	C	0.085749999	C	0.707700014	C	0.89380002	C			Top	(A/G)
rs10815979									0.04654	T	0.074600004	T	0.926599979	T	0.937300026	C	0.372200012	C	Top	(A/G)
rs12002381									0.374799997	T	0.361400008	T	0.435400009	C	0.91079998	C	0.208499998	T	Bot	(T/C)
rs13284598	0.035344248				0.881699979		0.357296096	A												
rs10759008									0.628799975	G	0.952799976	A	0.731899977	A	0.341899991	A	0.975499988	A	Top	(A/G)
rs10759009									0.671599984	G	0.915899992	A	0.0131	A	0.008162	A	0.878199995	A	Top	(A/G)
rs10759010	0.253666745	A	0.047468451	A	0.302700013		0.525995957	B												
rs10759011			0.000765788	B																
rs10759011	0.155964423				0.302100003		0.503022596	A												
rs10739174	0.001854143		0.007548781	B	0.510699987		0.980956413	A	0.811699987	C	0.800400019	C	0.680499971	C	0.993799985	T	0.651000023	C	Top	(A/G)
rs10815980			0.28233991	B																
rs10977328			0.846166188	A																
rs10977328	0.778343105	A			0.25909999		0.182003049	B												
rs10759012			0.992836665	B																
rs10759012	0.459675904	A			0.513599992		0.257678263	A												
rs10759013									0.913100004	A	0.483099997	A	0.507300019	C	0.343699992	C	0.79339999	A	Bot	(T/G)
rs7028784									0.675400019	G	0.805800021	A	0.926500022	G	0.524900019	A	0.485100001	G	Top	(A/G)
rs12000930									0.2236	C	0.572899997	C	0.389299989	T	0.282900006	T	0.691100001	C	Top	(A/G)
rs17584499									0.820500016	C	0.50849998	C	0.148499996	C	0.319099993	C	0.376500011	C	Bot	(T/C)
rs7023424									0.68629998	A	0.404500008	A	0.8222	G	0.707799971	A	0.703199983	A	Top	(A/G)
rs10815983									0.813899994	A	0.759199977	A	0.278800011	A	0.188099995	A	0.619599998	A	Top	(A/G)
rs13287579									0.807699978	A	0.248300001	A	0.8477	G	0.4102	G	0.584500015	G	Top	(A/G)
rs10815984									0.920700014	T	0.136899993	C	0.133699998	T	0.607500017	T	0.547599971	C	Top	(A/G)
rs10815985	0.325943302		0.678373729	A	0.787999988		0.267805725	B												
rs10815986			0.677677974	B																
rs10815986	0.467625541	A			1		0.476690016	B												
rs13295511	0.002799101	A			0.923600018		0.941887925	A												
rs13295870	0.002822034				0.923600018		0.748793325	B												
rs10759014									0.869099975	G	0.656000018	A	0.281500012	G	0.621699989	G	0.153200001	G	Top	(A/G)
rs10511512									0.649399996	G	0.241600007	G	0.573000014	T	0.189099997	T	0.336100012	G	Bot	(T/G)
rs2890841									0.570599973	T	0.783299983	T	0.985800028	T	0.942799985	C	0.276899993	C	Bot	(T/C)
rs7867067									0.751600027	G	0.341199994	G	0.836099982	G	0.88410002	A	0.505400002	A	Top	(A/G)
rs10815989									0.751500011	A	0.461199999	G	0.522899985	A	0.875100017	A			Bot	(T/C)
rs7850165	0.008524653	A	0.434891125	A	0.894999981		0.429548932	A	0.783299983	A	0.839100003	G	0.653100014	G	0.402999997	G	0.628099978	A	Top	(A/G)
rs7853293	0.000127232	A			0.78609997		0.943544739	B	0.492799997	G	0.099849999	G	0.596300006	A	0.579699993	G			BOT	(T/C)
rs10977337									0.299100012	T	0.048549999	T	0.463200003	C	0.636200011	C			BOT	(T/C)
rs2196066	0.036510625	A			0.782199979		0.046840204	A	0.04174	T	0.105800003	T	0.314599991	T	0.354699999	T	0.313899994	T	Top	(A/C)
rs1368680									0.219300002	G	0.244299993	G	0.044670001	A	0.277700007	A			TOP	(A/G)
rs7861793	0.813164044	A			1		0.806095417	A												
rs7866753	0.077922901				0.605199993		0.210115499	B	0.143000007	T	0.235499993	T	0.2016	C	0.405800015	C			TOP	(A/G)
rs6477360									0.217199996	C	0.29460001	C	0.378500015	T	0.992600024	C	0.774600029	C	Top	(A/G)
rs6477360	0.181209779				0.322100014		0.672917178	B	0.217199996	C	0.29460001	C	0.378500015	T	0.992600024	C	0.774600029	C	Top	(A/G)
rs11794550									0.555199981	A	0.423900008	A	0.101599999	A	0.167400003	A	0.863900006	G	Bot	(T/C)
rs1433541									0.080300003	T	0.069169998	T	0.976599991	C	0.844399989	C			Top	(A/G)
rs10977342	0.308107342	A			0.850300014		0.075086882	B												
rs16928589	0.064692091	A			1		0.551149213	B												
rs10511511									0.564300001	A	0.902100027	A	0.328099996	A	0.74970001	A	0.545700014	G	Top	(A/G)
rs10511511	0.163608336				0.780499995		0.723386971	B	0.564300001	A	0.902100027	A	0.328099996	A	0.74970001	A	0.545700014	G	Top	(A/G)
rs7856948									0.326700002	G	0.022539999	G	0.642400026	G	0.354900003	G	0.110699996	A	Bot	(T/C)
rs7857074									0.082280003	G	0.048269998	G	0.071479999	A	0.821500003	G			BOT	(T/C)
rs17585256									0.401300013	T	0.220799997	T	0.341699988	G	0.719500005	G	0.279000014	G	Bot	(T/G)
rs10815990	0.433570038				0.588500023		0.067336248	B												
rs1897671																				
rs1897671	0.438461381	A			0.606700003		0.965419303	B												
rs976385	0.877671142	A			1		0.631496442	A												
rs10815991	0.949018158		0.336134476	A	0.374599993		0.041250966	B												
rs10977348	0.655270534		0.160129701	A	0.322100014		0.368486202	B												
rs9408748	0.529542869				0.320899993		0.368352582	B												
rs1019955			0.780195687	B					0.68870002	G	0.797500014	G	0.017750001	G	0.020129999	G	0.576399982	A	Bot	(T/C)
rs1019955	0.295752152				0.668299973		0.93720639	B	0.68870002	G	0.797500014	G	0.017750001	G	0.020129999	G	0.576399982	A	Bot	(T/C)
rs7032026	0.131302265				1		0.785291388	B												
rs10759016									0.116999999	T	0.221599996	T	0.790700018	T	0.477600008	T			TOP	(A/G)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_Treut_pval	Treut_phase	Ilmn Strand	ACTG
rs7028941	9	8897666	0.299699992		G	T					0.900480544	A	0.432032801	A																					0.788271907	B															
rs1897669	9	8904531	0																																								0.299699992	A	0.707199991	A			Top	(A/G)
rs10116608	9	8904947	0	-	A	C	0.067658773	A	0.810211703	A													0.64230001	B			0	B		B			0.043587133			1		0.218755657	A												
rs10815996	9	8905142	0.04442	+	C	T	0.736303112	B	0.840202194	A	0.849303357	B	0.753428667	B					0.899256328	B	0.291334698	B	0.346899986	B	0.975396324	B	0.903900027	B	0.185701792	B	0.335608866	B	0.431013845		0.785837197	A	0.840799987		0.174660519	B												
rs13286950	9	8905397	0.023603221	+	C	G	0.316109306	B	0.379329082	A													0.270500004	B			0.802699983	A		B			0.9828935			0.04442		0.112764761	A												
rs10759017	9	8905963	0.023603221	+	A	G					0.588848641	B	0.023603221	B																					0.700238313	A															
rs10046838	9	8906449	0																																						0.221300006	G	0.544799984	G	0.582000017	A	0.824400008	G	0.363400012	G	Top	(A/G)
rs12335529	9	8908295	0	-	A	G	0.13389987	A	0.689011249	A													0.59829998	B			0	B		B			0.026752338			1		0.197653087	A												
rs7854221	9	8909998	0.131200001																																						0.690500021	C	0.793200016	T	0.59829998	T	0.569899976	T	0.251500011	C	Bot	(T/C)
rs16928621	9	8911426	0.036959998																																						0.460200012	C	0.206200034	C	0.702700019	C	0.61500001	A	0.131200001	C	Top	(A/C)
rs10977361	9	8912089	0.036959998																																						0.062569998	A	0.036959998	A					0.355199993	A	Top	(A/G)
rs4740969	9	8912286	0.019160001																																						0.566200018	G	0.595499992	G	0.408600003	G	0.093680002	G	0.291399986	G	Bot	(T/C)
rs17662529	9	8912434	0.010655911																																						0.836000025	C	0.931100011	C	0.752300024	T	0.782899976	C	0.019160001	C	Bot	(T/C)
rs10977362	9	8912467	0.010655911	+	A	G	0.545665754	B	0.673492895	B													0.278400004	B			0.6426	A					0.010655911	A		0.257400006		0.06921089	A	0.794799984	G	0.610800028	A	0.117600001	A	0.221000001	A			TOP	(A/G)
rs7858252	9	8913351	0.190099999	-	C	T	0.381637984	A	0.194248188	A													0.961399972	B			0.987100005	A		B			0.41820601			0.450199992		0.656712729	A												
rs16928627	9	8913381	0.035470001	+	C	T	0.615957957	A	0.942915557	A													0.190099999	A			0.273699999	B					0.622299112	A		0.682299972		0.989074121	B	0.409999996	C	0.377600014	C	0.681400001	C	0.82950002	T			BOT	(T/C)
rs7020371	9	8913715	0.035470001	-	A	G	0.494088635	A	0.545114296	B													0.762499988	A			0.907100022	A					0.502020026	A		0.035470001		0.407605377	B	0.145999998	C	0.280800015	C	0.190799996	T	0.479699999	T			TOP	(A/G)
rs10119762	9	8913819	6.68854E-05	+	A	G	0.35113288	A	0.665219558	B													0.140900001	B			0.289200008	A		B			0.266255822			1		0.305689065	B												
rs9299077	9	8914197	6.68854E-05	+	C	T	0.268862985	A	0.134730553	A													0.719699979	A			0.814599991	B		B			6.68854E-05			0.756500006		0.693540333	B												
rs1368684	9	8914538	0.317900002																																						0.550800026	G	0.762000024	A	0.369399995	A	0.317900002	A	0.898299992	A	Bot	(T/C)
rs4385516	9	8914568	0.34740001																																										0.824500024	A	0.707199991	G			Top	(A/G)
rs9644893	9	8915157	0.212699994																																						0.518100023	C	0.832400024	A	0.423500001	A	0.34740001	A	0.976499975	A	Top	(A/C)
rs10977363	9	8916071	0.091770001																																						0.649100006	C	0.926100016	A	0.275099993	A	0.611599982	A	0.212699994	A	Bot	(T/G)
rs1897676	9	8916956	0.001578108	-	A	G					0.135944447	B	0.894298042	A	0.50765401	B																									0.890699983	A	0.72390002	G	0.323199987	G	0.48179999	G	0.091770001	G	Bot	(T/C)
rs10283776	9	8919077	0.001578108	+	A	G	0.425332164	B	0.207271855	B					0.348731372	B	0.490776045	B	0.071365012	B	0.904086966	A			0.083550382	A	0.773400009	A	0.001578108	B	0.322860344	B		A					B											
rs2043400	9	8926948	0.174199998	-	C	T					0.950922922	B	0.226671946	A																											0.908699989	G	0.811999977	G	0.299600005	G	0.422699988	G	0.174199998	G	Bot	(T/G)
rs10759020	9	8926967	0.090343589																																						0.422699988	G	0.881900013	G	0.368200004	A	0.994400024	A			Top	(A/G)
rs1433548	9	8927116	0.028403561	+	C	T					0.786012386	A	0.437056159	A	0.090343589	B																									0.440299988	A	0.970399976	G	0.03751	G	0.303799987	G	0.698599994	G	Top	(A/G)
rs10511514	9	8927478	0.028403561	-	A	G					0.028403561	B	0.494595526	A	0.682846002	A																													0.697099984	C	0.455500007	C			BOT	(T/C)
rs16928634	9	8928939	0.054120001																																						0.230700001	G	0.260600001	G	0.054120001	T	0.079939999	T	0.92839998	T	Top	(A/C)
rs17662920	9	8929940	0.054120001																																						0.756500006	G	0.58099997	G	0.247199997	G	0.626999974	G			Top	(A/C)
rs12551212	9	8929970	0.247199997																																						0.442200005	T	0.268599987	T	0.777899981	C	0.649299979	T			TOP	(A/G)
rs7047447	9	8930141	0.00134842																																																	
rs16928642	9	8930693	0.00134842	-	A	G	0.428725377	B	0.424284365	A					0.903834677	A	0.54631292	A	0.00134842	A	0.213504879	B	0.888400018	A	0.774574254	A	0.1831	B	0.016671526	B	0.161088387	A	0.015653643			1		0.812833186	A												
rs1897678	9	8930725	0.001487	+	A	T	0.502785952	B	0.477369147	A													0.001487	B			0.770500004	A					0.508125623	A		0.590799987		0.478138949	A												
rs10816010	9	8931155	0.055220088	-	C	T					0.667678401	B	0.055220088	B																					0.750714683	A															
rs10816012	9	8931668	0.01276																																						0.424400002	C	0.289000005	C	0.6074	T	0.727199972	C	0.226699993	C	Top	(A/G)
rs10759021	9	8931696	0.01276	+	A	G	0.136216385	A	0.158972742	B	0.757435166	B	0.910444416	B	0.402829049	B	0.077997682	B	0.653086034	B	0.828449299	B	0.01276	A	0.938965354	B	0.34709999	B	0.642147161	B	0.617631209	B	0.599901662		0.499045391	A	0.130899996		0.372041729	B	0.796999991	A	0.875199974	G	0.046879999	G	0.168699995	G	0.367799997	G	Bot	(T/C)
rs10816014	9	8933234	0.128228754	+	C	T					0.31043628	A	0.608845462	B																					0.128228754	B															
rs10977393	9	8936379	0.017200001	+	C	G					0.831512466	B	0.822648534	A	0.609194622	B	0.722132738	A	0.161828886	B	0.928702371	B			0.717439849	B			0.403365352	A	0.234790559	A			0.774681548	A															
rs7021805	9	8941425	0.002654	+	C	G	0.899950341	A	0.500811668	B													0.218899995	A			0.487899989	B		B			0.194332013			0.017200001		0.881865488	B												
rs10816018	9	8941749	0.002654	+	C	T	0.890178517	A	0.911277189	A													0.333000004	A			0.427700013	A		B			0.128017427			0.002654		0.848136693	A	0.037160002	T	0.054839999	T	0.047649998	C	0.033519998	C	0.608200014	C	Bot	(T/C)
rs10816019	9	8941886	0.01172		C	T					0.236972568	B	0.895054537	A																					0.86141637	B															
rs10816019	9	8941886	0	-	C	T	0.37624672	A	0.190288572	B					0.161805256	A	0.297268326	B	0.513570666	A	0.25808037	A	0.01172	A	0.994619305	A	0.560400009	B	0.212700481	B	0.568608658	B	0.457030996			0.2227		0.420472319	B												
rs14335545	9	8942346	0	+	C	G	0.675171548	A	0.601013824	B	0.443310789	B	0.898902987	B					0.569446504	A	0.056836532	B	0.515699983	A	0.233192872	A	0	B	0.249213763	B	0.310491034	A	0.049641239		0.680332158	B	1			0.376612805	B												
rs10739178	9	8942714	0	+	A	C	0.439307335	B	0.020109277	A													0.310600013	B			0	A					0.867103501	A		1		0.434964285	A												
rs7848109	9	8943425	0.128000006																																						0.543099999	T	0.469999999	T	0.35589999	G	0.850799978	G			Bot	(T/G)
rs7852703	9	8945010	0.128000006																																						0.457800001	A	0.786800027	C	0.128000006	C	0.433899999	C			Top	(A/C)
rs12343455	9	8945420	0.209299997																																						0.972000003	T	0.70480001	T	0.310400009	T	0.346599996	C	0.291599989	C	Top	(A/G)
rs4526401	9	8946534	0.001855																																						0.235300005	T	0.209299997	T	0.357300013	T	0.738600016	C			Top	(A/G)
rs17791622	9	8949010	0.001855	+	C	G	0.440715412	B	0.761121961	B	0.138713567	B	0.335231983	B			0.402920482	B	0.925420118	B	0.345724131	A	0.6679002 26	B	0.243741201	B	0.364499986	B	0.353235384	B	0.598747084	A	0.2774582 12		0.732213486	A	0.001855		0.942613816	B												
rs7037483	9	8950011	0.0372																																						0.800800026	G	0.846599996	A	0.664499998	A	0.63410002	G	0.442000002	A	Top	(A/G)
rs7851829	9	8950329	0.006042																																						0.0372	G	0.080059998	G	0.127299994	A	0.056200001	A	0.73269999	A	Bot	(T/C)
rs2117103	9	8955645	0.006042	-	C	T	0.097539824	B	0.780893792	B													0.006042	B			0.806800008	B					0.575558555	A		0.150600001		0.962077327	A												
rs10977409	9	8955753	0.01548	+	C	T	0.249172114	A	0.988519745	B					0.16852226	A	0.135895706	A	0.983506556	A	0.668018274	A	0.01548	A	0.048664887	A	0.507099986	A	0.873356059	B	0.577275943	A	0.91319753			0.148699999		0.301262052	B	0.823899984	T	0.653299987	T	0.998099983	C	0.194299996	T			Top	(A/G)
rs2117105	9	8955780	0.017376858	-	C	G	0.1032803	A	0.584652309	A	0.69351198	A	0.883803303	B	0.833616488	B	0.902301755	B	0.053670792	A	0.155292107	B			0.71175605	B	0.816399992	B	0.048787372	B	0.993897055	A	0.017376858		0.573501667	B	0.472499996		0.960929502	B												
rs10816022	9	8960493	0.286599994																																						0.545700014	T	0.795400024	C	0.90899998	C	0.839299977	T			Bot	(T/C)
rs1036277	9	8961580	0.033935678																																						0.456200004	C	0.286599994	C	0.476000011	T	0.324900001	T	0.404599994	C	Bot	(T/C)
rs13289308	9	8961666	0.033935678	+	C	T	0.669607437	B	0.375992041	B					0.741706141	A	0.451120998	A	0.850411271	B	0.86205008	A	0.054850001	A	0.802854867	A	0.107500002	A	0.033935678	B	0.097160112	A	0.08479112			0.223399997		0.923171876	A												
rs10816023	9	8962171	0.043430001	+	A	C	0.184512485	A	0.669543256	A	0.456094177	B	0.112665336	A	0.146845649	A	0.892947159	A	0.894960214	A	0.27629866	A	0.043430001	A	0.364138695	A	0.04941	A	0.23200399	B	0.834893681	A	0.893823008		0.908843886	A	0.05889	A	0.966663588	B												
rs1368676	9	8962570	0.01825																																						0.810699999	G	0.75940001	T	0.614799976	T	0.7579	G			Bot	(T/G)
rs1368677	9	8962798	0.01825	+	A	T	0.34461853	A	0.537263851	B													0.01825	A			0.864099979	A		B			0.261778383			0.369300008		0.114269236	B												
rs2381933	9	8962925	0.04916	+	C	T	0.209812757	B	0.522415755	A	0.285701631	B	0.528752092	B	0.343576238	B	0.914329296	B	0.676550558	A	0.918597171	A	0.04916	B	0.111095603	B	0.864099979	B	0.70421003	B	0.682416705	A	0.138028364	A	0.913498127	B	0.203199998		0.1455413	A												
rs10977415	9	8963301	0.047813801	+	A	G					0.134862096	A	0.924712688	A																					0.845725261	A															
rs2381934	9	8963980	0.047813801	+	A	G	0.047813801	B	0.378991618	A	0.554374547	B	0.536110379	B	0.980768689	A	0.093235688	A	0.124654031	B	0.829277044	B	0.953700006	B	0.905707322	B	0.234699994	A	0.520903977	B	0.395784249	A	0.508022136	A	0.942759979	A	0.063749999	A	0.390422922	B	0.134399995	G	0.115800001	G	0.675300002	A	0.434500009	A	0.983099997	G	Bot	(T/C)
rs12339309	9	8964640	0.141557609	-	C	T					0.141557609	A	0.266346341	B																					0.926365973	A													0.439200014	G	Top	(A/G)
rs12337165	9	8965148	0.102716834	+	A	T					0.615693682	B	0.532247854	A																					0.853471159	B															
rs12337165	9	8965148	0.074409999	+	A	T	0.999084408	A	0.234521781	B									0.102716834	A	0.721437307	A	0.886900008	B	0.116786846	A	0.188800007	B	0.308024024	B	0.138562811	A	0.105997297			1		0.215319492	B												
rs10977419	9	8965175	0.074409999																																						0.074409999	C	0.088799998	C					0.984000027	C	Bot	(T/C)
rs1541935	9	8966008	0.130799994																																						0.698099971	C	0.932799995	T	0.992500007	T	0.130799994	C	0.910099983	T	Bot	(T/C)
rs7022702	9	8966241	0.210800007																																						0.36680001	A	0.913600011	A	0.688300014	G	0.210800007	A	0.474299997	A	Bot	(T/C)
rs17586734	9	8967444	0.237499997																																						0.745299995	A	0.827000022	A	0.237499997	A	0.529600024	A			Bot	(T/C)
rs7024787	9	8969016	0.000276093																																						0.850799978	T	0.998300016	T	0.675000012	C	0.85799998	T	0.3759	T	Top	(A/G)
rs12554851	9	8970881	0.000276093	+	C	T	0.771810989	B	0.469933383	B																	0.816399992	A					0.000276093	A		0.548399985		0.097307942	B	0.503400028	C	0.313499987	C					0.640799999	T	Bot	(T/C)
rs1036278	9	8971644	0.02317	+	A	C	0.865810535	B	0.052293686	A													0.647000015	A			0.02753	A		B			0.129898721			0.02723		0.557259575	A	0.3468	C	0.56190002	C	0.02317	A	0.442699999	A			BOT	(T/G)
rs10511515	9	8972266	0.442274526	-	A	G					0.442274526	B	0.709957456	A	0.879186902	B																									0.777499974	T	0.846800029	C	0.982500017	C	0.549899995	T			Top	(A/G)
rs10511515	9	8972266	0.008579	-	A	G					0.620897089	B	0.568119263	A																					0.836873694	A															
rs10511515	9	8972266	0.008579	-	A	G	0.699281504	B	0.187190717	B													0.008579	A			0.664399982	B					0.693362808	A		0.451200008		0.286344382	B	0.777499974	T	0.846800029	C	0.982500017	C	0.549899995	T			Top	(A/G)
rs10511516	9	8972308	0.001741602	-	C	T					0.87372016	B	0.413843438	B	0.358570281	B																																				
rs10511516	9	8972308	0.001741602	-	C	T	0.50445451	B	0.616457772	B	0.509632186	A	0.52853032	B	0.199704477	B	0.325193663	B	0.756435061	B	0.203818017	A	0.019160001	B	0.001741602	B	0.021770001	B	0.475142774	B	0.726568999	B	0.019013286	A	0.847296847	B	0.171000004		0.863293928	B												
rs10816027	9	8972620	0.036120001																																						0.437000006	C	0.286599994	C	0.036120001	A	0.161300004	A	0.450599998	A	Top	(A/C)
rs10977422	9	8972712	0.002681	-	C	T					0.254655018	B	0.744460864	A																					0.466164395	B															
rs10977422	9	8972712	0.002681	-	C	T	0.939694844	B	0.709088784	A													0.267800003	B			0.275400013	B					0.811296331	A		0.002681		0.597501176	A												
rs16928717	9	8972735	0.020139574	+	C	T	0.763389551	B	0.163875533	B									0.690014586	B	0.874634669	B	0.686399996	A	0.382808096	A	0.399399996	B	0.29337243	B	0.91582305	B	0.357405173			0.760900021		0.058875873	B												
rs12555539	9	8972866	0.01256	+	C	T	0.613346186	B	0.875218572	A																	0.816399992	A					0.020139574	A		0.322400004		0.514025649	B												
rs10977423	9	8974129	0.01256	+	C	T	0.555279205	A	0.784211743	B	0.425660354	B	0.468044674	B	0.032276279	B	0.438833339	B	0.576200445	B	0.603478935	B	0.41839999	B	0.809619407	B	0.181600004	B	0.528357037	A	0.382106735	B	0.672230473	A	0.398496387	B	0.01256		0.547847415	A												
rs4742554	9	8974469	0.01581	+	G	T					0.964766793	A	0.819896641	B																					0.758115058	A															
rs4742554	9	8974469	0.01497	+	G	T	0.619285813	B	0.531938851	B													0.591947868	A	0.242960812	B	0.444749054	B	0.985226746	B	0.01581	A	0.600724508	A	0.514699996	B	0.930872158	B	0.339211121	B	0.530166992			0.267800003		0.598745048	B												
rs4380999	9	8974647	0.01497	-	A	G	0.246857517	A	0.207606234	B	0.845935034	B	0.908248867	A	0.157145552	B	0.145432444	B	0.964315633	A	0.978409366	B	0.01497	A	0.137405023	B	0.840200007	B	0.44155855	B	0.178542052	B	0.790896941	A	0.425534893	A	0.233600006		0.246741622	B	0.793099999	T	0.814599991	C	0.593800008	C	0.554199994	T			Top	(A/G)
rs10511517	9	8974937	0.001245285	-	A	T					0.870827958	B	0.275856354	A																					0.5025363	A															
rs10511517	9	8974937	0.001245285	-	A	T	0.944086198	A	0.921019043	A													0.603799999	A			0.503700018	A					0.001245285	A		0.472499996		0.397644559	B												
rs2890842	9	8975221	0.049670676	+	A	G					0.260893148	A	0.609443613	A	0.803478411	A																																				
rs10977424	9	8975404	0.020426466	+	A	G					0.049670676	B	0.893142874	B																					0.882093419	A															
rs1368679	9	8975580	0.010405088	+	A	G					0.689167017	A	0.020426466	B																					0.965617805	A															
rs1368679	9	8975580	0.010405088	+	A	G	0.020437746	A	0.010405088	B													0.128299996	A			0.177300006	B		B			0.069512382			1		0.190952296	A												
rs10511518	9	8976162	0.018466237	-	C	G					0.754215196	B	0.018466237	B	0.943222462	A																																				
rs10116364	9	8976723	0.00086633	+	C	G	0.930691491	B	0.520603847	A													0.945500016	B			0.629000008	A					0.082023196	A		0.141599998		0.622694218	B												
rs7871147	9	8976928	0.00086633	+	A	G	0.955010846	A	0.158095993	A													0.619400024	A			0.292400003	A		B			0.00086633			1		0.573341757	B												
rs7863982	9	8977006	0.00513	-	A	C					0.4261692	B	0.445842991	A																					0.899672041	A															
rs7863982	9	8977006	0.00513	-	A	C	0.793838725	B	0.681672725	B					0.793896411	B	0.881732081	B	0.228212508	B	0.862831684	A	0.00513	A	0.985786636	B	0.334399998	B	0.900190732	B	0.066484535	B	0.607941858	A		0.116999999		0.145788448	B												
rs9299083	9	8977930	0.1193																																						0.748099983	T	0.794799984	T	0.1193	T	0.533200026	T			Top	(A/G)
rs2039331	9	8978375	0.001833																																						0.409700006	A	0.355300009	A	0.413100004	G	0.427300006	G	0.502300024	G	Top	(A/G)
rs10977426	9	8979686	0.001833	+	C	G	0.553677833	A	0.487159375	B													0.04002	A			0.155900002	B		B			0.424540683			0.001833		0.290083864	B												
rs9299084	9	8983027	0.339971641	-	A	G					0.794728819	B	0.525318077	A	0.339971641	B																									0.81370002	T	0.657299995	T	0.917400003	C	0.383899987	T	0.675499976	T	Bot	(T/C)
rs1331665	9	8986113	0.210099995																																						0.77579999	A	0.798699975	C	0.576300025	A	0.736599982	A	0.808099985	C	Bot	(T/G)
rs10977429	9	8986408	0.041719999																																						0.346500009	C	0.877499998	C	0.457700014	C	0.210099995	C	0.28639999	T	Top	(A/G)
rs13285582	9	8986425	0.001239688																																						0.041719999	C	0.171000004	C	0.683700025	C	0.890500009	C	0.325700015	C	Top	(A/G)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs10977431	9	8987520	0.001239688	+	C	T	0.001239688	A	0.875007536	B																	0.518999994	B		B			0.698279743				0.562099993		0.972893343	B												
rs10977432	9	8989697	0.182158124																																						0.768999994	C	0.653900027	T	0.864899993	T	0.409000009	T	0.469999999	T	Top	(A/G)
rs973117	9	8990033	0.169952783	+	A	C	0.685327894	B	0.316010885	A													0.426400006	B			0.780099988	B		B			0.182158124				0.773500025		0.307513877	B	0.983799994	G	0.551500022	T	0.686999977	G	0.702000022	T	0.641200006	T	Bot	(T/G)
rs7874540	9	8990476	0.009728157		A	T					0.179483936	B	0.673271945	B																					0.169952783	A																
rs7874540	9	8990476	0.005909	+	A	T	0.742582179	B	0.745108234	B					0.010608352	B	0.984746851	B	0.052734111	A	0.492563578	A	0.916299999	A	0.997115776	B	0.098760001	B	0.3729773	B	0.462652913	A	0.009728157				0.282099992		0.580446835	B												
rs7871755	9	8990709	0.005909	+	A	C	0.573203718	A	0.373592996	A	0.831553505	A	0.707649317	A	0.138187738	A	0.732899584	B	0.504206456	B	0.572671859	B	0.334399998	A	0.367454851	B	0.701099992	A	0.074430656	B	0.785418027	B	0.061845231		0.795205846	A	0.300799996		0.191769183	A	0.562900007	C	0.205500007	C	0.059300002	C	0.638300002	C	0.005909	C	Bot	(T/G)
rs10977434	9	8991075	0.021168903	-	A	C	0.614375597	A	0.687291557	A	0.891456474	A	0.487282841	B	0.021168903	B	0.78862429	B	0.214037693	A	0.884309744	A	0.102700003	B	0.492376436	A	0.882300019	B	0.893830593	B	0.71424319	A	0.052205049		0.776085227	B	1		0.311403807	B												
rs10511519	9	8991207	1.16862E-05	-	A	G					0.062411812	A	0.639550731	A	0.304948624	A																											0.583800018	T	0.512600005	T	0.31220001	C	0.544399977	C	0.552100003	T	Top	(A/G)
rs10816028	9	8991239	1.16862E-05	+	C	T	0.783611108	A	0.626905448	B													0.700200021	A			0.916499972	B		B			1.16862E-05				0.58890003		0.348151141	A	0.621299982	T	0.526300013	T	0.185699999	T	0.645299971	T	0.851199985	C	Bot	(T/C)
rs10511520	9	8991538	0.0005942	-	A	G					0.443788035	A	0.996488933	A	0.4391629	B																											0.509599984	T	0.579400003	T	0.067720003	T	0.045310002	T	0.0005942	C	Bot	(T/C)
rs7040386	9	8993282	0.01787																																						0.647300005	T	0.243100002	T	0.55430001	T	0.588400006	T	0.01787	T	Top	(A/C)
rs12006331	9	8993758	0.0006334																																						0.33070001	T	0.720600009	G	0.841000021	G	0.556699991	G	0.126499996	G	Bot	(T/G)
rs17587560	9	8994122	0.0006334																																						0.358099997	G	0.333299995	G	0.237399995	G	0.29460001	G	0.0006334	G	Top	(A/G)
rs10816029	9	8994896	0.002031258																																										0.476700008	A	0.635399997	A			Bot	(T/C)
rs7025315	9	9000336	0.002031258	-	C	G	0.934386498	A	0.756853583	B	0.016603773	B	0.43589965	B	0.418756824	B	0.78270631	B	0.993246443	B	0.045743784	B	0.358799994	A	0.168531549	B	0.65109998	B	0.203076882	B	0.816678595	A	0.002031258	A	0.789521696	B	0.709200025		0.018894928	B												
rs1331662	9	9000662	0.011025909																																						0.643400013	T	0.847599983	C	0.965200007	C	0.378199995	T	0.120399997	T	Top	(A/G)
rs7029466	9	9001180	0.011025909	-	C	G	0.991491993	B	0.932606128	A	0.169382495	B	0.991533123	A	0.244080245	A	0.988058769	A	0.436425217	B	0.715431314	B	0.614600003	B	0.016591798	B	0.286900014	B	0.661736982	B	0.382591507	B	0.011025909		0.470070298	A	0.683600009		0.608664539	B												
rs7046257	9	9001209	0.017088747	-	C	T	0.587971647	A	0.792225879	A	0.769606271	A	0.949337148	A	0.281176083	B	0.674655062	B	0.112778747	A	0.344832316	B	0.333200008	B	0.983721678	B	0.448700011	A	0.282193452	A	0.133349159	A	0.101772095	A	0.216926733	B	0.777899981		0.074317218	B												
rs4742556	9	9001250	0.017088747	+	A	T	0.750954665	B	0.462328097	A	0.824539977	B	0.377069983	A	0.952319244	A	0.445729528	B	0.128503663	A	0.420603432	A	0.53579998	B	0.887881254	B	0.980400026	B	0.017088747	A	0.67323707	A	0.125435877	A	0.824273182	B	0.381099999		0.8046939	A												
rs613105	9	9004141	0.051709998	+	A	C					0.892543133	A	0.819277074	A	0.649825196	A																																						
rs613613	9	9004274	0.03238	+	C	T					0.504503418	B	0.121395084	B	0.59968319	A																											0.102499999	A	0.051709998	A	0.527899981	A	0.436399996	A	0.878099978	A	Bot	(T/C)
rs424051	9	9004740	0.01147																																						0.053380001	T	0.03238	T	0.739099979	C	0.819500029	C			Bot	(T/C)
rs440238	9	9006071	0.01147	+	A	C	0.446660303	A	0.954810585	A	0.202116983	A	0.716122752	A	0.636813226	A	0.367613047	A	0.986104759	B	0.602619232	A	0.560500026	B	0.180567218	A	0.325399995	B	0.070055146	B	0.198561223	A	0.316685141		0.100853296	B	0.157299995		0.562350801	A	0.021199999	T	0.01147	T	0.818799973	T	0.345899999	T	0.405400008	T	Bot	(T/G)
rs17664375	9	9006897	0.129099995																																						0.324800015	G	0.1523	G	0.745899975	G	0.850799978	G			TOP	(A/G)
rs420441	9	9007136	0.129099995																																										0.180700004	T	0.129099995	T			TOP	(A/G)
rs17587734	9	9008296	0.002368																																						0.421299994	A	0.181799993	A	0.894900024	A	0.976199985	A	0.420399994	A	Top	(A/G)
rs7029807	9	9008656	0.002368																																						0.109700002	T	0.07	T	0.146300003	G	0.148300007	G	0.002368	T	Top	(A/C)
rs12348476	9	9010101	0.003395493	+	A	G	0.360658958	B	0.905140436	B													0.988200009	A			0.351999998	A		B			0.122929735				0.583100021		0.003395493	B	0.367599994	G	0.188299999	G	0.697899997	G	0.891499996	G	0.483599991	G	Top	(A/G)
rs378363	9	9010223	0.001444																																						0.562900007	G	0.417800009	G	0.050110001	G	0.391499996	G	0.130400002	A	Top	(A/G)
rs13287915	9	9010987	0.001444																																						0.829100013	G	0.856700003	T	0.833500028	G	0.797500014	G	0.001444	G	Top	(A/C)
rs640391	9	9012205	0.000564898																																						0.264999986	C	0.282799989	C	0.8204	C	0.84829998	T			Bot	(T/C)
rs1412104	9	9012312	0.000564898	+	C	T	0.205561957	B	0.995256815	B													0.419099987	B			0.720499992	A		B			0.672248597				0.473100007		0.000564898	B												
rs1041506	9	9012772	0.068422418	-	C	T					0.85663076	A	0.160578435	A																					0.973700376	A																
rs1041506	9	9012772	0.068422418	-	C	T	0.13405097	B	0.990046228	B					0.068422418	A	0.597547901	B	0.569587031	A	0.915837512	A	0.068669997	B	0.912869318	B	0.185699999	A	0.487067588	A	0.382645602	B	0.401544407	A			1		0.122834339	B												
rs7875273	9	9013522	0.126100004																																						0.230700001	T	0.149299994	T	0.282900006	C	0.747500002	C	0.583000004	T	Top	(A/G)
rs12686090	9	9014254	0.032115442																																						0.485100001	T	0.306300014	T	0.48300001	G	0.517799974	G	0.126100004	G	Bot	(T/G)
rs324490	9	9015146	0.024909999	-	A	G	0.467067345	A	0.509689619	A													0.040380001	A			0.488900006	B		B			0.032115442				1		0.560557303	A												
rs324489	9	9015295	0.024909999	-	A	T	0.499683041	A	0.601276083	A	0.628992337	A	0.501213478	A	0.256691105	B	0.430820426	A	0.940965749	A	0.516903905	B	0.024909999	B	0.325507566	A	0.520900011	B	0.140881327	A	0.559616719	A	0.408664454	A	0.040621362	B	0.65109998		0.646936421	A												
rs540259	9	9016157	0.01556																																						0.1391	G	0.099660002	G	0.641799986	G	0.291599989	G	0.194900006	G	Top	(A/G)
rs3887368	9	9016457	0.01556	-	C	T	0.079988113	A	0.874959396	A													0.01556	A			0.2579	B		B			0.735222496				1		0.327500251	A	0.297300011	T	0.468400002	T	0.999800026	C	0.873600006	C	0.734600008	T	Top	(A/G)
rs178938	9	9016815	0.041664195	-	A	T	0.458714003	B	0.731344714	A	0.7242498	B	0.379831971	B	0.680591549	B	0.300604334	B	0.333526815	B	0.794498309	B	0.094899997	A	0.65272294	A	0.475699991	A	0.074186369	B	0.282175602	B	0.889641994		0.041664195	A	0.653199971		0.54811234	B												
rs167785	9	9016854	0.010345627																																						0.068700001	T	0.07638	T	0.236000001	C	0.928499997	T	0.233500004	T	Top	(A/G)
rs1348642	9	9017331	0.010345627	-	A	T	0.284211121	B	0.626045483	A													0.617799997	A			0.567499995	A		B			0.010345627				0.871399999		0.771853571	A												
rs1348641	9	9017495	0.089380004																																						0.370400012	A	0.526199997	A	0.110100001	G	0.515100002	G			Bot	(T/C)
rs324496	9	9018285	0.089380004																																						0.089380004	G	0.089589998	G	0.204699993	G	0.925499976	A	0.303299993	G	Top	(A/G)
rs1543670	9	9019030	0.291200012																																						0.66109997	A	0.892799974	A	0.345200002	G	0.376199991	G			BOT	(T/C)
rs1274728	9	9019216	0.061810002																																						0.573800027	A	0.535600007	A	0.291200012	G	0.302100003	G			Top	(A/G)
rs324495	9	9019463	0.049386546																																						0.061810002	A	0.064460002	A	0.807099998	A	0.791499972	A			TOP	(A/G)
rs10759030	9	9020039	0.049386546	-	C	T	0.049386546	B	0.817393835	A													0.344099999	B			0.154400006	A					0.886791262	A			1		0.354030098	B												
rs368381	9	9020732	0.00935																																						0.130600005	G	0.181899995	G	0.265399993	A	0.952199996	A	0.305000007	A	Top	(A/G)
rs382364	9	9021563	0.00935																																						0.00935	T	0.045570001	T	0.344199985	C	0.433499992	C	0.451299995	C	Bot	(T/C)
rs1889817	9	9021977	0.104099996																																						0.447400004	T	0.584100008	T	0.175999999	C	0.314000011	C			BOT	(T/C)
rs182719	9	9022105	0.104099996																																						0.104099996	G	0.190599993	G	0.263500005	G	0.197699994	G	0.854900003	G	Bot	(T/C)
rs895173	9	9022560	0.065310001																																						0.333000004	T	0.278800011	T	0.755900025	T	0.50029999	T	0.33829999	C	Top	(A/G)
rs324461	9	9022693	0.01479																																										0.1096	A	0.065310001	A			Bot	(T/C)
rs172862	9	9022872	0.01479																																						0.565500021	C	0.660899997	C	0.01479	C	0.0211	C	0.221599996	T	Top	(A/G)
rs324463	9	9025390	0.082419999	+	G	T					0.929134258	B	0.283272405	B																					0.216477182	B																
rs10759031	9	9025800	0.064209998																																						0.179800004	T	0.379200012	T	0.393999994	T	0.082419999	T	0.6074	C	Bot	(T/C)
rs324517	9	9027625	0.064209998																																						0.503400028	G	0.611299992	G	0.552399993	T	0.629999995	T	0.064209998	T	Bot	(T/G)
rs324519	9	9028430	1.28574E-05																																						0.4833	C	0.373400003	C	0.305599988	T	0.297300011	T	0.1435	T	Bot	(T/C)
rs1331660	9	9029222	1.28574E-05	+	A	G					0.44388022	A	1.28574E-05	B	0.289889927	A																											0.663500011	C	0.594399989	C	0.007462	C	0.070019998	C	0.071330003	C	Bot	(T/C)
rs1331660	9	9029222	0.007462	+	A	G	0.124996399	B	0.2672181	B					0.808844781	A	0.489862854	A	0.910639695	A	0.208206795	A	0.581099987	B	0.043657617	B	0.142499998	B	0.844807588	B	0.053033835	A	0.429486538	A			0.890299976		0.584219726	B	0.663500011	C	0.594399989	C	0.007462	C	0.070019998	C	0.071330003	C	Bot	(T/C)
rs172864	9	9029395	0.166299999	-	A	T	0.337238806	B	0.244535879	A													0.336199999	B			0.166299999	B		B			0.179487522				0.495000005		0.434073141	B												
rs12000440	9	9029886	0.091959998																																										0.600399971	T	0.301200002	T			Bot	(T/C)
rs324524	9	9030946	0.091959998																																						0.281599999	G	0.857200027	G	0.877499998	G	0.523199976	G	0.091959998	A	Bot	(T/C)
rs16928808	9	9031784	0.158299997																																						0.40959999	G	0.158299997	G	0.702000022	A	0.913699985	A			BOT	(T/C)
rs324526	9	9032075	0.082649998																																						0.928499997	C	0.519599974	T	0.955799997	T	0.958500028	C	0.190599993	T	Bot	(T/C)
rs324527	9	9032311	0.082649998																																						0.937600017	T	0.458499998	T	0.082649998	C	0.139300004	C			BOT	(T/C)
rs88818	9	9033421	0.002183387																																						0.782299995	C	0.757300019	A	0.954900026	C	0.983200014	C			Top	(A/C)
rs16928814	9	9034347	0.002183387	-	A	G	0.010473654	B	0.481327321	A													0.3486	B			0.065190002	B					0.002183387	A			1		0.483210571	A					0.962199986	C	0.806500018	C			Top	(A/G)
rs324533	9	9035011	0.081029996	-	C	T	0.408061285	B	0.230304077	A	0.225805527	B	0.307142227	A	0.643381391	B	0.923887035	A	0.400714318	A	0.556563704	B	0.281699985	B	0.487785303	B	0.686200023	B	0.903229697	A	0.333928485	A	0.844452333	A	0.731746374	B	1		0.978168105	B	0.249300003	G	0.364300013	G	0.380899996	G	0.097709999	G	0.137500003	A	Bot	(T/C)
rs324536	9	9036581	0.081029996																																						0.497900009	A	0.733399987	A	0.673699975	A	0.567499995	A	0.081029996	G	Bot	(T/C)
rs324538	9	9037859	0.080459997																																						0.747799993	A	0.907400012	A	0.111500002	C	0.202399999	C			Top	(A/C)
rs13285004	9	9038128	0																																						0.130199999	T	0.090010002	T	0.372700006	T	0.080459997	T			Bot	(T/C)
rs226359	9	9039072	0	+	C	T	0.274403538	A	0.710562466	A									0.093793866	B	0.195398097	B	0.618300021	A	0.249202071	A	0	B	0.087055337	B	0.05341052	A	0.156246998				1		0.909630901	B												
rs1854905	9	9040722	0.007634	-	C	T	0.182947093	A	0.152494342	B	0.550935413	B	0.548668644	A					0.06105044	A	0.067433812	B	0.380800009	B	0.889788184	A	0.424499989	A	0.850373107	B	0.577826312	B	0.968102755	A	0.808265065	A	1		0.671118757	B												
rs10977456	9	9040817	0.007634																																						0.032760002	C	0.007634	C	0.157399997	C	0.123000003	C			Bot	(T/C)
rs10759035	9	9042619	0.031190001																																						0.053780001	A	0.045510002	A	0.488200009	A	0.031190001	A			BOT	(T/C)
rs324458	9	9043770	0.040350001	+	A	T	0.845609116	B	0.701068886	A	0.089039649	B	0.409965267	B	0.390983974	A	0.217415874	B	0.49499949	B	0.088303229	A	0.725600004	A	0.246099735	B	0.040350001	B	0.494610012	B	0.246170249	A	0.916130564		0.539929776	A	0.631699979		0.433290459	A												
rs12005189	9	9044075	0.049389999	-	A	G	0.116090381	A	0.184297152	A													0.568899989	B			0.049389999	A		B			0.222208659				0.580799997		0.166360964	B												
rs2225482	9	9044313	0.030789999																																						0.1655	T	0.166299999	T	0.329100013	C	0.816200018	T			BOT	(T/C)
rs324457	9	9044621	0.008895538	-	G	T					0.201709331	B	0.194398292	A	0.772737063	A																											0.752799988	G	0.570299983	G	0.114399999	G	0.030789999	G			Bot	(T/G)
rs324457	9	9044621	0.008895538	-	G	T	0.638335812	A	0.008895538	A	0.144941444	B	0.83082533	A	0.945495387	A	0.256551508	B	0.870457792	B	0.550455301	B	0.988900006	A	0.756054323	A	0.511900008	A	0.566566242	A	0.837298226	B	0.999342647	A	0.342820593	A	0.857800007		0.600216916	B	0.752799988	G	0.570299983	G	0.114399999	G	0.030789999	G			Bot	(T/G)
rs1412096	9	9044913	0.029030001	-	G	T					0.254309601	A	0.251482578	B	0.352059908	A																											0.691399992	G	0.533100009	G	0.770099998	G	0.257800013	G	0.135199994	T	Top	(A/C)
rs1412096	9	9044913	0.029030001	-	G	T	0.7612705	B	0.478031255	A	0.820222787	B	0.173356944	B	0.51154584	A	0.962059717	A	0.529422	B	0.315910031	B	0.572700024	A	0.616428172	B	0.029030001	B	0.337052325	B	0.658146173	A	0.379229649	A	0.562873414	A	0.842700005		0.856967334	A	0.691399992	G	0.533100009	G	0.770099998	G	0.257800013	G	0.135199994	T	Top	(A/C)
rs1556420	9	9046791	0.216682628	+	C	T	0.256006309	B	0.571832947	A													0.723200023	B			0.385500014	A		B			0.216682628				0.893599987		0.448459125	B												
rs10977458	9	9046867	0.01146	-	G	T					0.637309957	B	0.559062767	B																					0.583186606	B																
rs10977458	9	9046867	0.01146	-	G	T	0.702216749	A	0.292122915	A													0.861800015	B			0.01146	A		B			0.021126785				0.728500009		0.19228974	A												
rs10816040	9	9047632	0.053298366	-	C	T	0.053298366	B	0.060848168	A					0.350233237	A	0.943585739	B	0.881023297	A	0.939546796	A	0.86500001	B	0.094998823	B	0.273499996	A	0.848956407	A	0.610645979	B	0.361810922	A			0.625899971		0.743805367	B	0.426400006	G	0.552999973	G	0.412800014	G	0.128900006	G	0.35769999	A	Top	(A/G)
rs10816041	9	9048076	0.014925955	-	A	G	0.071356537	A	0.085605948	B					0.104945678	A	0.801984639	A	0.454018681	B	0.077805675	A	0.787899971	B	0.461572127	A	0.365500003	B	0.510041053	A	0.533650604	B	0.17097502	A			1		0.563092471	A												
rs12005015	9	9048285	0.014925955	+	C	T	0.062344424	A	0.014925955	B													0.859399974	B			0.130199999	A		B			0.782259046				0.3653		0.187846376	B												
rs12376049	9	9048319	0.064622732	+	A	T	0.064622732	A	0.617078081	A													0.628499985	B			0.100400001	A					0.265397185	A			0.892199993		0.339695176	B												
rs12551218	9	9048949	0.081890002	+	A	T	0.204553738	B	0.283883419	B	0.979213753	B	0.094613953	A	0.704493929	B	0.087249419	A	0.724447132	B	0.943092393	B	0.543200016	B	0.620494019	B	0.725799978	A	0.949337085	B	0.156685664	B	0.178835885		0.367649001	B	0.081890002	A	0.864938952	A												
rs17665194	9	9049182	0.105099998																																						0.898699999	C	0.679199994	C	0.523400009	C	0.105099998	C			BOT	(T/C)
rs324498	9	9049545	0.359899998																																						0.398699999	G	0.359899998	G	0.924399972	G	0.964699984	A	0.818099976	A	Top	(A/G)
rs12555043	9	9050444	0.067147114																																						0.619899988	G	0.909399986	G	0.799099982	G	0.554400027	G			Top	(A/G)
rs16928839	9	9051234	0.067147114	-	C	T	0.338071676	A	0.908354989	B													0.536599994	B			0.158399999	A					0.067147114	A			0.601999998		0.989593537	A	0.540300012	A	0.631500006	A	0.34709999	G	0.4102	G	0.190099999	G	Bot	(T/C)
rs324499	9	9051283	0.004052471	-	A	T	0.605151957	A	0.498984121	B	0.384044977	A	0.969739981	B	0.099094662	A	0.856032596	A	0.403574085	B	0.310986997	B	0.536599994	A	0.182090355	B	0.848100007	A	0.089908912	B	0.216240239	A	0.196669675		0.927009128	B	0.381500006		0.925542127	A												
rs12006155	9	9051331	0.004052471	+	C	T	0.224014458	A	0.287731016	B	0.612452406	A	0.734736203	B	0.059435403	B	0.808766982	A	0.833903428	B	0.038515545	B	0.988200009	A	0.77912435	A	0.198500007	A	0.004052471	B	0.717698024	B	0.165152679		0.87995428	A	0.673099995		0.824550962	B	0.897099972	C	0.893700004	C	0.154200003	C	0.250999987	C	0.136600003	C	Top	(A/G)
rs324501	9	9051819	0.172299996	+	A	G					0.507898226	A	0.749374107	B																					0.222972315	A					0.438800007	A	0.719099999	A	0.735400021	A	0.354600012	A			Top	(A/G)
rs324501	9	9051819	0	+	A	G	0.978825199	A	0.478778826	A													0.870299995	B			0.172299996	B		B			0.690078991				0.84859997		0.252181417	B	0.438800007	A	0.719099999	A	0.735400021	A	0.354600012	A			Top	(A/G)
rs324502	9	9052032	0	-	A	T	0.559220633	B	0.165365987	B									0.032673687	A	0.604987558	B	0.618300021	B	0.186936529	B	0	A	0.263661077	B	0.197744964	B	0.153232152	A			1		0.25910595	B												
rs17588757	9	9052189	0.1087	-	A	G	0.738964043	A	0.953441974	A	0.897166492	A	0.591514543	B	0.50144024	A	0.278769294	A	0.875694098	A	0.1619282	B	0.619400024	B	0.393534815	A	0.987699986	A	0.272611392	B	0.589842504	A	0.310247079	A	0.220108891	A	0.697700024		0.660191228	B	0.830799997	C	0.748600006	C	0.392800003	T	0.659200013	T			Top	(A/G)
rs10977464	9	9054311	0.1087																																						0.881099999	C	0.573599994	C	0.155300006	C	0.1087	C	0.557200015	C	Bot	(T/C)
rs10816043	9	9054648	0.119900003	+	A	G					0.816280069	A	0.297482629	B																					0.39699329	B					0.202099994	G	0.119900003	G	0.999800026	G	0.149000004	G	0.142199993	A	Top	(A/G)
rs10816043	9	9054648	0.119900003	+	A	G	0.847337912	A	0.340671713	B													0.648699999	B			0.400400013	A					0.679660463	A			0.577499986		0.751588478	A	0.202099994	G	0.119900003	G	0.999800026	G	0.149000004	G	0.142199993	A	Top	(A/G)
rs7026475	9	9055478	0.053474173																																						0.697600007	A	0.362500012	A	0.681800008	A	0.623000026	A			Bot	(T/C)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs16928863	9	9055718	0.053474173	+	A	G	0.922186516	B	0.838573497	A	0.118700479	B	0.06459047	A					0.711873756	A	0.076536536	B	0.402700007	B	0.57093991	A	0.158399999	A	0.937825382	B	0.427937948	A	0.053474173	A	0.757969597	B	0.7324		0.825781947	A												
rs10977466	9	9055941	0.073797644	+	C	G					0.378434405	A	0.235770678	A																					0.633573428	B																
rs984826	9	9056718	0.073797644	+	C	G					0.506761295	B	0.764375764	A																					0.073797644	B																
rs324510	9	9058110	0.261999995																																										0.486200005	T	0.261999995	T			Top	(A/G)
rs324511	9	9058314	0.199499995																																						0.958199978	C	0.697899997	C	0.986500025	T	0.8926	T			Top	(A/G)
rs408960	9	9059839	0.199499995																																						0.958800018	A	0.933499992	A	0.517199993	A	0.867699981	A	0.199499995	G	Bot	(T/C)
rs324512	9	9060574	0.006223																																						0.9648	C	0.985499978	C	0.819299996	C	0.340700001	C			Bot	(T/C)
rs324513	9	9060768	0.006223	-	C	T	0.433590305	B	0.185990152	B													0.194700003	B			0.006223	A		B			0.458970351				0.74849999		0.178460683	B												
rs12339518	9	9061242	0.037160002																																						0.728699982	A	0.707599998	G					0.037160002	A	Bot	(T/C)
rs192973	9	9062104	0.077965994																																						0.602599978	A	0.642199993	A	0.138999999	G	0.323100001	G	0.547900021	A	Top	(A/G)
rs324481	9	9062730	0.02327	-	C	T					0.203226715	A	0.44592395	B	0.077965994	A																									0.175300002	G	0.765900016	G	0.87410003	A	0.885599971	A	0.737399995	G	Bot	(T/C)
rs324486	9	9064830	0																																						0.91869998	G	0.855499983	G	0.805199981	G	0.760100007	A	0.02327	A	Bot	(T/C)
rs12001258	9	9066214	0	-	A	G	0.138455729	A	0.700602982	A													0.453999996	A			0	B		B			0.993991562				1		0.266957445	B												
rs324474	9	9067555	0.001595	+	C	G	0.343509146	B	0.202546651	B	0.683817277	B	0.977200298	A	0.518461704	A	0.569035864	A	0.646595938	A	0.46119969	B	0.311800003	B	0.622798499	A	0.001595	A	0.829377276	B	0.325986551	A	0.218411994	A	0.389458026	B	0.682399988		0.145528431	B												
rs324475	9	9067607	0.001595	+	G	T	0.970831057	A	0.160004213	A	0.633570855	A	0.568231421	A	0.534024985	B	0.591937885	B	0.599728574	B	0.776544441	A	0.403100014	A	0.586039534	B	0.001595	B	0.621295653	B	0.334164593	B	0.178917682		0.374252789	A	0.837400019		0.163736418	A												
rs324479	9	9069771	0.031129999	+	A	G					0.224788064	A	0.935095758	A	0.871694281	B																									0.9824	G	0.366600007	G	0.58890003	G	0.689899981	A	0.031129999	A	Bot	(T/C)
rs324480	9	9069956	0.018100001																																						0.777999997	T	0.860800028	C	0.773000002	C	0.809899986	C	0.148699999	T	Bot	(T/C)
rs484454	9	9075530	0	-	C	G	0.303074314	A	0.823971945	B													0.806900024	B			0.018100001	B		B			0.035990977				0.847299993		0.305411884	A												
rs483370	9	9075698	0	-	A	C	0.027657892	B	0.896318527	B													0.352299988	B			0	A					0.152110863	A			1		0.626254309	A												
rs674362	9	9075811	0.033949782	+	A	C					0.82051464	B	0.420508916	B																					0.350652066	A																
rs674362	9	9075811	0.033949782	+	A	C	0.21309485	A	0.830586381	B					0.596099132	A	0.403174935	B	0.390792849	A	0.346915099	B	0.140200004	A	0.326608918	A	0.058929998	A	0.491635999	B	0.464145939	A	0.537559612	A			0.651300013		0.033949782	B												
rs10977476	9	9075941	0.03681821	-	A	G	0.11564992	B	0.746021489	A													0.646099985	B			0.475199997	A		B			0.188782814				0.237599999		0.774409449	A												
rs369166	9	9076923	0.026489999	+	A	G	0.607107648	A	0.824697814	A													0.357199997	B			0.080329999	B		B			0.03681821				0.923099995		0.156570917	A												
rs523872	9	9077205	0.026489999	+	C	T	0.89713307	A	0.849631872	A													0.435600013	B			0.026489999	B		B			0.410973379				0.772899985		0.191491062	A												
rs828405	9	9078734	0.054559998	+	C	G	0.699792379	A	0.994403562	A													0.158099994	A			0.054559998	A					0.094227848	A			0.634899974		0.224134731	B												
rs557369	9	9079643	0.075891196	-	A	G					0.400037881	B	0.654632508	B	0.196560446	A																																				
rs7864207	9	9080834	0.0003644	-	C	G	0.075891196	A	0.780738031	A													0.161300004	B			0.179800004	B					0.977467444	A			1		0.217319067	A												
rs324466	9	9080876	0.0003644	-	C	G	0.52255147	A	0.630768295	A													0.45480001	A			0.0003644	B					0.469230387	A			0.554899991		0.087589341	A												
rs10977479	9	9082345	0.106731972	-	C	G	0.900385875	A	0.548733996	A	0.570040078	A	0.106731972	B	0.669044777	B	0.337419623	B	0.298400549	A	0.476040658	B	0.253899992	A	0.721828603	B	0.623199999	B	0.965470205	A	0.380683212	B	0.320248157	A	0.657255755	A	0.288700014		0.774624773	A												
rs472324	9	9084805	0.144600004																																						0.342000008	C	0.690299988	C	0.144600004	T	0.149299994	T	0.2597	C	Bot	(T/C)
rs10977486	9	9086813	0.012899758																																						0.779500008	G	0.472299993	G	0.914399982	G	0.270900011	A	0.593599975	A	Top	(A/G)
rs1445205	9	9087111	0.012899758	+	C	G	0.473304639	A	0.023858217	A													0.158299997	A			0.936200023	A		B			0.012899758				0.515100002		0.351812852	B												
rs7024971	9	9088121	0.0009765	-	A	T	0.249853986	B	0.628632273	A	0.31630152	B	0.865528425	B	0.968352217	A	0.91730424	A	0.488525784	B	0.273223991	B	0.149900004	B	0.963206615	B	0.753099978	A	0.998429575	B	0.830562993	B	0.018797426		0.062123094	B	0.314900011		0.597574865	A												
rs324542	9	9092409	0.0009765	+	C	T	0.342832623	A	0.649703065	A	0.409087099	A	0.337328075	A	0.554700787	A	0.513657562	B	0.872559212	B	0.958461427	A	0.498699993	A	0.648939462	B	0.0009765	B	0.929637346	B	0.97602619	B	0.18484813		0.265831062	A	0.770600021		0.142417386	A	0.64200002	G	0.826399982	A	0.888300002	A	0.674000025	G	0.183699995	G	Bot	(T/C)
rs16928942	9	9096511	0.04923955	-	A	G	0.232571462	A	0.937703632	A													0.077869996	A			0.753099978	B					0.326967778	A			0.314900011		0.956665773	A												
rs324546	9	9097265	0.04923955	+	A	G	0.268155426	A	0.410029389	A													0.175400004	B			0.08845	B		B			0.04923955				0.361000001		0.081613536	A												
rs324545	9	9097653	0.072460003																																						0.639599979	A	0.597899973	G	0.537599981	A	0.284700006	A	0.110100001	A	Bot	(T/C)
rs324544	9	9098336	0.072460003	-	A	G	0.082242762	A	0.548786609	A													0.741100013	B			0.072460003	B		B			0.119062697				0.362599999		0.128419657	A	0.46509999	A	0.846199989	A	0.099809997	G	0.085879996	G	0.488799989	A	Bot	(T/C)
rs9299087	9	9099538	0.091109999	+	C	T					0.449968453	A	0.80277148	B	0.582762507	B																									0.597500026	T	0.761200011	T	0.449200004	C	0.091109999	C	0.104199998	C	Bot	(T/C)
rs10816048	9	9099984	0.024158336																																						0.448599994	T	0.724399984	T	0.844500005	C	0.277700007	C	0.095909998	C	Bot	(T/C)
rs560380	9	9102698	0.024158336	+	A	C	0.024158336	A	0.94220789	A													0.819000006	B			0.05477	B					0.87709013	A			0.312299997		0.066242553	A	0.332599998	T	0.927999973	G	0.026860001	G	0.030160001	G	0.061269999	T	Bot	(T/G)
rs17589981	9	9109229	0.169699997																																						0.309100002	C	0.783100009	C	0.169699997	T	0.240400001	T	0.950800002	C	Top	(A/G)
rs324541	9	9109327	0.217199996																																						0.567499995	A	0.76639998	G	0.704599977	A	0.90960002	A	0.381799996	A	Top	(A/G)
rs324540	9	9109349	0.217199996																																						0.575399995	T	0.983900011	C	0.809499979	C	0.839999974	C	0.217199996	T	Top	(A/G)
rs10120781	9	9115205	0.027349999																																										0.769599974	C	0.653299987	C			Top	(A/G)
rs10117009	9	9118101	0.027349999	-	A	C	0.506863292	A	0.302118328	B													0.027349999	B			0.629000008	B		B			0.291894926				1		0.195171775	A	0.4014	G	0.719299972	T	0.773299992	G	0.298099995	G			Top	(A/C)
rs10977509	9	9121375	0.003246492	+	A	G	0.611458504	B	0.112007766	A	0.54721334	B	0.396971469	A	0.496398948	A	0.900901928	B	0.904262326	B	0.996738328	B	0.249599993	A	0.742393551	A	0.629000008	A	0.71608107	B	0.970170302	B	0.78851779		0.365558323	A	1		0.330853295	B	0.468100011	A	0.51880002	G	0.798399985	A	0.120999999	A			Top	(A/G)
rs10511521	9	9123196	0.003246492	+	C	T					0.27742528	B	0.003246492	A																															0.388599992	T	0.342599988	T			Bot	(T/C)
rs10511521	9	9123196	0.103699997	+	C	T	0.138621605	A	0.331037128	A													0.103699997	A			0.629000008	B					0.543650341	A			0.515100002		0.814903407	A					0.388599992	T	0.342599988	T			Bot	(T/C)
rs12335759	9	9123578	0.202075748		A	G					0.927166122	A	0.950590723	A																					0.720405559	B																
rs12335759	9	9123578	0.009172832	+	A	G									0.620737577	B	0.571432068	A	0.429845513	B	0.25911966	A			0.242959563	B			0.427363222	A	0.202075748	B																				
rs12335761	9	9123593	0.009172832	+	A	G	0.782212471	B	0.637385084	B													0.138300002	A			0.629000008	A		B			0.009172832				1		0.552865357	B												
rs10977514	9	9125223	0.014302053	+	A	G	0.187296591	B	0.014302053	A	0.483719459	A	0.258590118	A	0.696052154	A	0.678285111	A	0.59642875	A	0.239167167	A	0.02427	A	0.501095358	B	0.629000008	A	0.591830588	B	0.624765957	B	0.451128644		0.869741653	A	1		0.728983258	B												
rs10977516	9	9125857	0.020030473	-	C	T	0.020030473	B	0.392284289	A													0.069650002	A			0.629000008	A		B			0.352085197				0.692499995		0.916040807	B												
rs10118348	9	9127903	0.175400004																																						0.341399998	T	0.698099971	C	0.624300003	T	0.175400004	T			Bot	(T/C)
rs10759045	9	9128685	0.253500015																																						0.644400001	G	0.671599984	G	0.564899981	G	0.931299985	A			TOP	(A/G)
rs4742564	9	9128847	0.253500015																																						0.253500015	G	0.886799991	T	0.439000011	T	0.553200007	G			TOP	(A/C)
rs9299088	9	9129360	0.047493408																																						0.983500004	A	0.726899982	G	0.770500004	A	0.470600009	A			BOT	(T/C)
rs7043302	9	9129951	0.047493408	-	A	C	0.212028574	A	0.755557985	B	0.143846041	A	0.293522077	B	0.047493408	B	0.729537768	A	0.069338626	B	0.557327417	A	0.328099996	A	0.738346105	B	0.617900014	A	0.5810923	B	0.235711608	B	0.469372284	A	0.787923033	B	1		0.554948726	A												
rs2028782	9	9131628	0.085675704	+	C	T	0.297219011	B	0.993411452	A	0.268803544	A	0.605755393	A	0.784939704	B	0.973676319	B	0.346994391	A	0.345374266	A	0.273000002	B	0.907476548	B	0.653599978	A	0.417290249	B	0.472992742	B	0.298884558		0.681311555	A	0.580900013		0.085675704	A												
rs957155	9	9132828	0.015892672	-	A	G					0.621746419	A	0.862808907	A																					0.318357285	B					0.454400003	G	0.77759999	G	0.3204	G	0.594099999	G	0.2861	G	Bot	(T/C)
rs957155	9	9132828	0.015892672	-	A	G	0.441188324	B	0.47336722	A					0.823734114	A	0.975362613	B	0.276518493	B	0.773750758	B	0.724300027	B	0.867927957	B	0.222100005	B	0.686444772	B	0.419125479	A	0.272809478				0.524900019		0.015892672	B	0.454400003	G	0.77759999	G	0.3204	G	0.594099999	G	0.2861	G	Bot	(T/C)
rs10816049	9	9134085	0.001079711																																						0.888599992	T	0.641200006	C	0.584800005	T	0.776899993	C	0.752399981	T	Bot	(T/C)
rs10977527	9	9134115	0.001079711	+	A	T	0.001079711	A	0.87651332	A	0.01311273	A	0.895347142	B	0.960448856	A	0.183186394	A	0.902447199	A	0.175661145	A	0.02036	A	0.58959424	B	0.498199999	B	0.42877959	B	0.356310746	B	0.739525598	A	0.273250261	A	0.04535		0.877498761	A												
rs1992671	9	9136140	0.033188279	-	A	G	0.193649056	A	0.706691396	B	0.791352518	A	0.359793648	B	0.837910593	A	0.033188279	A	0.676403536	B	0.658208642	B	0.535700023	A	0.872439881	A	0.89380002	B	0.52252992	B	0.794365156	A	0.698478124	A	0.905723177	A	0.404500008		0.174533853	B												
rs10121402	9	9136300	0.02906682	-	A	G	0.041969666	B	0.572511928	A	0.118145153	A	0.25353872	A	0.545674198	B	0.88115941	B	0.934689986	A	0.168118099	A	0.126399994	B	0.606318241	A	0.715499997	A	0.41776848	B	0.706070461	B	0.315898227		0.495159946	B	0.457399994		0.155617735	A	0.609300017	C	0.790199995	T	0.483999997	C	0.084909998	C			Top	(A/G)
rs1470433	9	9138168	0.008676	-	A	C	0.899431909	B	0.51427859	A													0.089579999	A			0.908200026	B		B			0.02906682				0.628799975		0.059199762	B												
rs1999741	9	9139128	0.000500147	+	C	T	0.826010232	B	0.799821371	B													0.693000019	B			0.633899987	B		B			0.540548034				0.008676		0.222429441	A	0.774200022	G	0.933899999	G	0.721300006	G	0.614700019	A	0.547999978	A	Bot	(T/C)
rs10977529	9	9139387	0.000500147	+	A	G	0.000500147	A	0.422894632	B													0.192300007	A			0.734700024	B		B			0.278286446				0.206799999		0.203905227	B												
rs10977530	9	9139546	0.01304																																						0.701099992	G	0.913200021	G	0.02606	G	0.01304	G	0.78670001	G	Bot	(T/C)
rs7861959	9	9141280	0.051722606																																						0.558799982	A	0.467500001	G	0.424400002	A	0.740199983	A	0.853100002	G	Bot	(T/C)
rs12003392	9	9141640	0.051722606	+	C	T	0.361583991	A	0.927107645	B													0.681299985	A			0.828599989	A		B			0.051722606				0.852599978		0.963314588	B	0.530200005	T	0.197300002	C	0.956799984	C	0.335500002	C	0.617799997	C	Top	(A/G)
rs7854497	9	9143346	0.326799989																																						0.508400023	G	0.868799985	G	0.326799989	G	0.8671	G	0.413599998	A	Bot	(T/C)
rs6477369	9	9145409	0.004030407																																						0.869599998	C	0.398000002	C	0.520799995	T	0.974900007	T			BOT	(T/C)
rs7036801	9	9145721	0.004030407	-	A	G	0.938312062	A	0.537471664	A													0.248600006	B			0.889699996	B		B			0.004030407				0.701399982		0.885619068	B	0.504999995	C	0.975899994	C	0.321200013	C	0.879700005	T	0.493299991	T	Top	(A/G)
rs7040160	9	9146055	0.1197																																						0.950100005	T	0.492500007	C	0.185000002	T	0.992299974	T	0.351099998	C	Bot	(T/C)
rs722636	9	9147088	0.01161	-	A	G	0.141855021	A	0.875005359	B													0.1197	A			0.899600029	A					0.306228868	A			0.403899998		0.126479234	B												
rs12375909	9	9148221	0.01161	-	A	G	0.207478544	B	0.924418307	A													0.830500007	B			0.458799988	A					0.709084865	A			0.01161		0.296203714	B	0.984899998	C	0.754999995	T	0.956399977	T	0.677399993	T			BOT	(T/C)
rs1072761	9	9149868	0.088990003	+	A	G	0.541224922	B	0.868579304	B													0.088990003	B			0.899600029	B					0.820434801	A			0.516900003		0.133714258	A												
rs1072692	9	9149897	0.317900002																																						0.876299977	A	0.625	C	0.921199977	A	0.7852	A			Top	(A/C)
rs12003567	9	9151679	0.129899994																																						0.317900002	C	0.685599983	C	0.43810001	C	0.956700027	T			BOT	(T/C)
rs2890854	9	9151898	0.129899994																																						0.882700026	C	0.680100024	T	0.129899994	C	0.296900004	C	0.887899995	C	Top	(A/G)
rs10816054	9	9152042	0.038213745																																						0.525399983	C	0.345499992	C	0.404000014	T	0.153999999	T	0.575600028	T	Top	(A/G)
rs1445208	9	9152669	0.038213745	-	A	T	0.208565975	A	0.523705762	A	0.344757587	A	0.163669565	B	0.649277828	A	0.771415435	A	0.6908108	A	0.494419758	B	0.076559998	A	0.686919523	A	0.997200012	B	0.574504497	B	0.816129377	A	0.831491771		0.621881118	A	0.355500013		0.038213745	B												
rs1445206	9	9154473	0.173299998																																						0.542699993	C	0.656799972	T	0.179499999	C	0.81190002	C	0.173299998	T	Bot	(T/C)
rs12000463	9	9155805	0.424899995																																						0.90960002	G	0.926100016	G	0.634999991	T	0.429100007	T			BOT	(T/G)
rs16929002	9	9156711	0.424899995																																										0.424899995	G	0.708500028	G			Bot	(T/C)
rs10816057	9	9161635	0.416999996																																						0.785099983	T	0.769699991	C	0.746100009	T	0.796899974	C	0.514999986	C	Bot	(T/C)
rs10977546	9	9161715	0.416999996																																						0.855499983	C	0.673500001	T	0.627600014	T	0.416999996	T	0.555899978	T	Bot	(T/C)
rs968079	9	9163304	0.02087	-	C	T					0.559269361	A	0.69559114	A	0.905592567	B																									0.464899987	C	0.825800002	C	0.59920001	T	0.422500014	T	0.704999983	C	Bot	(T/C)
rs968079	9	9163304	0.02087	-	C	T	0.806172086	B	0.766045446	B													0.118900001	B			0.02087	A		B			0.817964318				0.067659996	B	0.160566654	A	0.464899987	C	0.825800002	C	0.59920001	T	0.422500014	T	0.704999983	C	Bot	(T/C)
rs2120924	9	9166176	0.029086588	-	A	G	0.790878783	B	0.8547667	A													0.400700003	A			0.788600028	A		B			0.271031936				0.577600002		0.029086588	A	0.835799992	A	0.877799988	A	0.3917	G	0.503300011	G	0.660700023	G	Bot	(T/C)
rs7847947	9	9166870	0.097445685	-	C	T	0.097445685	B	0.767064608	B	0.90570823	A	0.78130525	A	0.204201367	B	0.309643458	B	0.497891709	B	0.46405146	B	0.402099997	B	0.344712645	B	0.479999989	A	0.955146411	B	0.61652637	B	0.152852593	A	0.116691726	B	0.73089999		0.640468951	A												
rs1968589	9	9167013	0.01101																																						0.723100007	G	0.197500005	G	0.298999995	G	0.363099992	G			Bot	(T/C)
rs1348644	9	9168137	0.006992																																						0.882000029	C	0.824400008	C	0.01101	C	0.055039998	C	0.867299974	C	Bot	(T/C)
rs2381970	9	9170827	0.006992	-	A	G	0.084751692	A	0.025645499	B													0.03785	A			0.394600004	B					0.048250526	A			0.30430001		0.018354219	B	0.692099989	C	0.979499996	C	0.037330002	T	0.006992	T	0.060369998	C	Bot	(T/C)
rs10977551	9	9170897	0.07181	-	A	T	0.299964589	B	0.663046459	B													0.101300001	B			0.458799988	A		B			0.663325951				0.1567		0.709528107	B												
rs1889820	9	9171361	0.011084493																																						0.687900007	A	0.31279999	A	0.07181	A	0.149599999	A	0.95539999	C	Top	(A/C)
rs1445213	9	9172216	0.005437812	-	C	T	0.206078559	B	0.677652715	A	0.45055944	B	0.386320059	A	0.777809531	B	0.011084493	B	0.862842703	B	0.230921457	A	0.274500012	A	0.974944139	B	0.870500028	B	0.185454448	B	0.62444205	B	0.277606071		0.242515688	B	0.524500012		0.01925446	A	0.883599997	C	0.867999971	C	0.085259996	T	0.095579997	T	0.81190002	T	Bot	(T/C)
rs10977553	9	9173542	0.005437812	-	C	T	0.783960784	B	0.933495329	B													0.678300023	A			0.931900024	B		B			0.361375852				0.928600013		0.005437812	A												
rs1445212	9	9173618	0.014432051																																						0.870800018	A	0.655900002	G	0.660899997	A	0.959900022	A	0.135499999	G	Top	(A/G)
rs7028024	9	9173823	0.014432051	+	C	G	0.975291481	A	0.276765304	A	0.642941509	A	0.266564818	A	0.579230329	A	0.308403863	A	0.536190239	B	0.383995622	B	0.322100014	A	0.796541821	B	0.141200006	B	0.170553377	B	0.509333452	A	0.018758338	A	0.449129615	A	0.304399997		0.014432051	B												
rs10123773	9	9174756	0.419400007																																						0.906000018	T	0.844900012	T	0.649200022	T	0.597500026	T			Top	(A/G)
rs10816060	9	9174911	0.224802177																																						0.926800013	C	0.540099978	C	0.952400029	C	0.4287	C	0.419400007	C	Bot	(T/C)
rs10511522	9	9175515	0.034370788	-	A	T					0.989901067	A	0.224802177	B	0.609567146	B																																				
rs10511522	9	9175515	0.002460522	-	A	T	0.75253068	B	0.598299379	B	0.720621016	B	0.403281194	B	0.805211341	A	0.885899012	B	0.034370788	B	0.919892249	B	0.953299999	A	0.741556712	B	0.706799984	A	0.272762768	B	0.155861193	B	0.047958809	A	0.698714147	B	0.564199984		0.751274162	B												
rs945464	9	9176346	0.002460522	-	A	G	0.816797319	B	0.069018019	A													0.968800008	A			0.572600007	B					0.417507177	A			0.926900029		0.002460522	B	0.62620002	G	0.759199977	G	0.308699995	A	0.779299974	A	0.921500027	G	Top	(A/G)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs10759050	9	9177272	0.039594283	+	G	T					0.403167375	B	0.638441305	A																					0.821919137	B																
rs10977554	9	9177451	0.039594283	+	C	T					0.039594283	B	0.509658616	B																					0.546688211	B																
rs10977555	9	9177539	0																																						0.587899983	A	0.132799998	A	0.979099989	G	0.607200027	A			TOP	(A/G)
rs16929043	9	9178533	0	-	A	G	0.069508824	B	0.881599049	B	0.231490092	B	0.639033695	A	0.520247374	A	0.889637484	B	0.645068492	B	0.734939814	A			0.418583467	B	0	A	0.29460315	B	0.102442506	B	0.0393235	A	0.641800792	A	1		0.840165416	B												
rs12349700	9	9178615	0.00531947	-	G	T	0.931750143	A	0.636758119	B													0.403800011	B			0.370799989	A					0.022286542	A			1		0.63161358	A												
rs1959404	9	9178865	0.002789869	-	C	T	0.852914378	A	0.62636629	B													0.201100007	B			0.782100022	A					0.00531947	A			0.578999996		0.487653767	B	0.626299977	C	0.031550001	C	0.898299992	C	0.854799986	T	0.150299996	C	Bot	(T/C)
SNP_A-1932037	9	9178957	0.002789869	+	C	T	0.019833522	B	0.35933239	A	0.079161221	B	0.490154458	B	0.433081024	B	0.537003854	B	0.250308075	B	0.583860624	B	0.01602	B	0.029039176	A	0.613399983	A	0.093268506	B	0.257670186	B	0.947094366	A	0.514149435	A	0.882099986		0.002789869	A												
rs41523646	9	9178957	0.002789869	+	C	T	0.019833522	B	0.35933239	A	0.079161221	B	0.490154458	B	0.433081024	B	0.537003854	B	0.250308075	B	0.583860624	B	0.01602	B	0.029039176	A	0.613399983	A	0.093268506	B	0.257670186	B	0.947094366	A	0.514149435	A	0.882099986		0.002789869	A												
rs10816061	9	9179356	0.015654637	+	C	T					0.807163611	B	0.454081606	A																					0.117149619	B																
rs10816061	9	9179356	0.015654637	+	C	T	0.090103779	B	0.934050462	A													0.884800017	A			0.8847	A					0.015654637	A			0.827000022		0.314024437	B												
rs10977556	9	9180055	0.30399999	+	A	T					0.770975909	B	0.748566444	A																					0.498623186	A																
rs12380451	9	9181014	0.199678743																																						0.424899995	T	0.30399999	T	0.546800017	T	0.47330001	T	0.346899986	T	Bot	(T/C)
rs1445210	9	9182961	0.157166245		G	T					0.199678743	A	0.618200148	A																					0.512290504	A					0.474700004	T	0.448799998	T	0.917200029	T	0.477600008	T			Bot	(T/G)
rs1445210	9	9182961	0.071740001	+	G	T	0.269392861	A	0.343274603	A													0.809599996	A			0.350100011	A		B			0.708515548				0.618399978		0.157166245	A	0.474700004	T	0.448799998	T	0.917200029	T	0.477600008	T			Bot	(T/G)
rs10114971	9	9184641	0.01213																																						0.185800001	G	0.449299991	G	0.071740001	A	0.127900004	A			TOP	(A/G)
rs12000334	9	9185240	0.01213																																						0.196999997	T	0.01213	T	0.752399981	T	0.321099997	T	0.808499992	C	Top	(A/G)
rs2028779	9	9185415	0.008849237																																						0.463499993	C	0.09347	C	0.783200026	C	0.976800025	C			BOT	(T/G)
rs2028780	9	9185670	0.008849237	-	A	G	0.574022018	B	0.971767336	B													0.959599972	B			0.978100002	A		B			0.097634391				0.842000008		0.008849237	A	0.784500003	T	0.460500002	C	0.9102	C	0.891900003	C	0.830900013	T	Bot	(T/C)
rs10977563	9	9186168	0.207255533																																						0.254500002	A	0.512799978	A	0.303900003	A	0.595300019	A			BOT	(T/C)
rs2028781	9	9186248	0.001882002	+	A	G	0.497857984	A	0.637287889	B	0.674386651	A	0.53252386	B	0.519542332	A	0.92833897	A	0.598523318	B	0.615192683	A	0.346300006	B	0.518568062	A	0.788699985	A	0.250495686	A	0.443291456	A	0.801293304	A	0.478493674	B	0.38440001		0.207255533	B												
rs10977564	9	9186661	0.001882002	+	A	G	0.058738425	A	0.328212399	B													0.918299973	A			0.126300007	B					0.001882002	A			0.068470001	A	0.551669805	A	0.250499994	A	0.05601	A	0.117399998	G	0.565699995	G			Bot	(T/C)
rs13440065	9	9187160	0.003260354	+	C	T	0.763898628	A	0.85395105	B													0.577199996	B			0.784399986	B					0.817331005	A			0.385399997		0.003260354	B	0.203899995	C	0.117700003	C	0.184400007	C	0.106600002	C			Bot	(T/C)
rs10435819	9	9187298	0.052220002																																						0.296600014	G	0.064410001	G	0.329299986	A	0.828599989	A	0.39320001	A	Bot	(T/C)
rs10435820	9	9187324	0.052220002	+	A	G	0.212378291	B	0.609778319	A	0.694168228	B	0.567587111	A	0.275044651	B	0.138912221	B	0.747836028	B	0.523541986	B	0.743499994	A	0.449802064	B	0.168899998	A	0.914946338	B	0.174079881	A	0.071495905		0.905498385	A	0.052220002	B	0.174013912	B												
rs1157067	9	9187812	0																																						0.930999994	G	0.803200007	G	0.651799977	G	0.356700003	G			Top	(A/C)
rs10121946	9	9189165	0	+	C	G	0.362376273	A	0.51429887	A													0.514800012	A			0	B		B			0.057453453				0.045609999		0.869511007	B												
rs2890856	9	9190590	0.002298715	+	A	G	0.75229919	B	0.698939847	B	0.614765773	A	0.798175099	A	0.359821077	B	0.393069908	A	0.898683465	B	0.369083511	B	0.431600004	A	0.706813393	B	0.222800002	A	0.218071858	B	0.149649739	A	0.347532798		0.327076622	A	0.041450001		0.137304465	B	0.253899992	G	0.075570002	G	0.048640002	A	0.645200014	A	0.375099987	A	Bot	(T/C)
rs10977567	9	9192872	0.002298715	-	A	G	0.86117032	B	0.638673839	B	0.682986008	A	0.343375998	B	0.445385963	B	0.110438032	A	0.618010801	B	0.24033809	B	0.810599983	A	0.109040191	A	0.889299989	B	0.417248469	B	0.059081305	A	0.002298715		0.134567233	A	0.236000001		0.967491214	A												
rs10977568	9	9193316	0.032710001	+	C	G					0.551804946	B	0.473808181	A																					0.28268417	B																
rs10977568	9	9193316	0.032710001	+	C	G	0.09390663	B	0.33339584	A													0.808399975	A			0.126300007	A		B			0.767850679				0.032710001		0.129954898	B												
rs1982319	9	9194531	0.001396103																																						0.736999989	C	0.926800013	T	0.104999997	T	0.174400002	T	0.923399985	C	Bot	(T/C)
rs12685122	9	9196006	0.001396103	-	A	C	0.00604373	A	0.763019755	B													0.846300006	A			0.126300007	B					0.001396103	A			0.03249		0.137728606	A												
rs10977574	9	9198635	0.004642554	+	C	T	0.041738793	A	0.922275272	B	0.520349516	B	0.928900458	A	0.884021774	A	0.936896651	A	0.366351087	B	0.058697686	A	0.80309999	A	0.991051971	B	0.995999992	A	0.636515565	B	0.385377226	A	0.004642554		0.497394107	A	0.204999998		0.447439334	B												
rs2381971	9	9199488	0.014889148	-	A	T	0.360425561	B	0.330313779	A									0.080704155	B	0.41817148	A	0.790000022	B	0.41253913	B	0.581900001	A	0.203887509	A	0.152316104	B	0.483998029	A			0.634999991		0.014889148	A												
rs1373807	9	9201379	0.02839																																						0.1505	C	0.02839	C	0.182899997	C	0.037310001	C	0.640500009	T	Bot	(T/C)
rs13283501	9	9201973	0.232099995																																										0.333600014	G	0.232099995	G			Bot	(T/G)
rs4596705	9	9204833	0.047594834																																						0.791400015	G	0.645799995	G	0.650699973	G	0.775900006	G	0.502799988	G	Bot	(T/G)
rs13299658	9	9205776	0.024000605	-	C	T	0.537510956	B	0.684097491	A													0.574400008	B			0.675899983	B		B			0.718711878				0.637700021		0.047594834	A												
rs7034782	9	9206368	0.024000605	-	C	T	0.024000605	A	0.971650471	A													0.517400026	A			0.808899999	A		B			0.376137888				0.736000001		0.884212934	B												
rs7034934	9	9206473	0.037126019																																						0.824400008	A	0.908299983	G	0.406399995	A	0.743700028	A	0.328299999	G	Top	(A/G)
rs10816064	9	9206980	0.037126019	-	C	T	0.037126019	A	0.174907169	A													0.311500013	A			0.223100007	B					0.861741605	A			0.636200011		0.645948996	A												
rs4132505	9	9211297	0.205599994	+	C	G	0.582619929	B	0.272687612	B													0.456800014	A			0.924000025	B					0.293685352	A			0.548300028		0.694665236	B												
rs4620334	9	9211800	0.205599994	+	A	G	0.580610168	B	0.649922842	B													0.384000003	A			0.218099996	B					0.347921772	A			0.205599994		0.527715585	B												
rs4357351	9	9213809	0.044580001																																						0.551800013	T	0.672100008	T	0.352600008	C	0.91079998	T	0.502200007	C	Top	(A/G)
rs13299923	9	9214376	0.008978162	-	C	T	0.100382961	B	0.059584522	B													0.214900002	A			0.044580001	A					0.069208997	A			0.396800011		0.754707033	A												
rs4409444	9	9215463	0.008978162	-	A	G	0.173240527	A	0.709849007	B													0.837499976	A			0.939700007	B					0.626463716	A			0.69690001		0.008978162	A	0.720899999	T	0.827300012	T	0.087509997	C	0.138300002	C	0.711700022	C	Top	(A/G)
rs7035832	9	9215919	0.013553404	-	A	G	0.013553404	B	0.658962775	B													0.788200021	A			0.455199987	A					0.037993508	A			0.928200007		0.014251005	B												
rs4621866	9	9218094	0.039310001																																						0.72240001	C	0.946699977	C	0.039310001	C	0.124300003	C	0.8222	C	Bot	(T/C)
rs12336488	9	9218107	0.066880003																																						0.099320002	C	0.066880003	C	0.985099971	C	0.292600006	C	0.673300028	T	Bot	(T/C)
rs17667884	9	9219566	0.231999993																																						0.4815	T	0.573800027	T	0.569400013	T	0.449000001	T	0.977500022	T	Top	(A/G)
rs6477375	9	9220674	0.011257565																																						0.718900025	G	0.231999993	G	0.340600014	G	0.388399988	G	0.563300014	A	Bot	(T/C)
rs10759052	9	9221961	0.002398057	+	A	G	0.233827025	A	0.702224741	A	0.450507879	A	0.011257565	A	0.192608152	A	0.346905142	A	0.563433013	B	0.519552368	B	0.675400019	A	0.771299153	A	0.931900024	B	0.68797123	B	0.962387383	B	0.947537534		0.383582072	A	0.787800014		0.065580476	A												
rs7042564	9	9222484	0.002398057	+	C	G	0.02781773	A	0.950846062	A	0.002398057	A	0.869127503	A	0.041762345	A	0.866480514	B	0.744870805	B	0.13728125	A	0.2421	B	0.218946668	A	0.492700011	B	0.442379659	B	0.143703058	B	0.620397071	A	0.04840999	A	0.767499983		0.01453002	A												
rs4390000	9	9224411	0.003673562	+	G	T	0.787262854	A	0.612443412	A	0.718718874	A	0.077084226	A	0.849295278	B	0.116493335	A	0.555987199	B	0.213639917	B	0.851300001	A	0.114473505	A	0.813499987	A	0.923621372	B	0.213438264	A	0.003673562		0.718455553	B	0.600899994		0.307828412	A												
rs4742571	9	9225372	0.01041																																						0.677100003	C	0.949500024	A	0.01041	C	0.01283	C	0.481700003	C	Bot	(T/G)
rs10117765	9	9227024	0.01397																																						0.054000001	T	0.01397	T	0.033920001	C	0.260600001	C	0.386000007	C	Bot	(T/C)
rs7864378	9	9228528	0.000381839	-	A	C	0.848020017	B	0.580270858	A													0.545000017	B			0.070720002	A		B			0.158831136				0.440100014		0.355464347	B	0.524399996	G	0.202299997	G	0.785700023	T	0.446500003	T			Top	(A/C)
rs4742577	9	9228714	0.000381839	-	A	C					0.371298039	B	0.000381839	A	0.340645151	B																																					
rs4742577	9	9228714	0.014645929	-	A	C	0.207375243	A	0.85877391	B	0.449617981	B	0.395984488	B	0.511327596	B	0.91782286	B	0.544635781	A	0.261144205	B	0.624000013	B	0.419543048	A	0.192000002	B	0.670730953	B	0.207281824	B	0.654228234	A	0.493422338	A	0.75059998		0.014645929	A												
rs7038241	9	9228776	0.016077059	-	G	T	0.602717768	B	0.654379147	A													0.99059999	B			0.254000008	A					0.888727569	A			0.8477		0.016077059	A												
rs4742578	9	9228929	0.016203389	+	A	C	0.093497632	A	0.923253755	A	0.440790305	A	0.748902395	B	0.358752693	B	0.674158886	A	0.503980231	A	0.338818978	B	0.569100022	B	0.771574256	A	0.192000002	B	0.18629879	B	0.085897091	B	0.045582416	A	0.019031439	A	0.83160001		0.016203389	A	0.789699972	C	0.928600013	A	0.03376	C	0.118100002	C	0.645699978	C	Bot	(T/G)
rs4617209	9	9229154	0.01390671	-	C	T	0.050792845	A	0.039778745	B	0.638178635	B	0.455369878	B	0.530923611	B	0.622489511	B	0.706536488	A	0.319166532	A	0.514400005	B	0.212423424	B	0.475699991	A	0.037145866	B	0.727129129	B	0.297686876		0.754116229	B	0.601100028		0.212219246	B	0.083949998	A	0.061500002	A	0.551900029	G	0.725300014	A			TOP	(A/G)
rs4568657	9	9236647	0.01390671	+	C	T	0.01390671	A	0.800041724	A													0.498899996	B			0.142100006	B		B			0.040221976				0.85769999		0.027947269	A	0.616999984	C	0.917500019	T	0.0788	T	0.180299997	T	0.787100017	T	Top	(A/G)
rs10977614	9	9237105	0.01956	-	G	T	0.218948152	B	0.699465601	B	0.519431715	B	0.23982076	B	0.686473235	B	0.762900944	B	0.478646979	A	0.172773824	A	0.991999984	B	0.591394861	B	0.628400028	A	0.58387036	A	0.092981675	B	0.234538069	A	0.906559355	B	0.601400018		0.675476768	B	0.907000005	C	0.440299988	C	0.115699999	A	0.189600006	A	0.808700025	A	Top	(A/C)
rs11791447	9	9239795	0.01956																																						0.680800021	C	0.575900018	C	0.02189	C	0.01956	C	0.529299974	C	Bot	(T/C)
rs11793988	9	9239820	0.267239897	+	C	T					0.387947384	A	0.64506829	A																					0.267239897	A																
rs7032620	9	9239912	0.027292978																																						0.268099994	C	0.904100001	T	0.925000012	C	0.694100022	C	0.379000008	C	Top	(A/G)
rs11791433	9	9240314	0.010297139	+	C	T	0.50226168	A	0.553170604	A													0.449999988	A			0.246800005	B					0.639961865	A			0.752799988		0.027292978	A												
rs10977616	9	9241152	0.010297139	+	A	T	0.644566106	A	0.744379721	B													0.758599997	B			0.528900027	B					0.821241422	A			0.700500011		0.010297139	B												
rs6477382	9	9242865	0.01464																																						0.051259998	A	0.01464	A	0.093099996	G	0.630500019	G			TOP	(A/G)
rs7872553	9	9243587	0.008726667																																						0.066440001	T	0.076760002	T	0.062309999	C	0.612999976	C	0.830900013	C	Top	(A/G)
rs4626664	9	9251737	0.002676904	+	A	G	0.049544636	B	0.795360881	A	0.635649555	A	0.430281898	A	0.36649486	B	0.882218667	B	0.450962167	A	0.880908836	B	0.656499982	A	0.993624448	B	0.216399998	A	0.629413672	B	0.673705729	A	0.647785909		0.688280853	A	0.49939999		0.008726667	B												
rs11792302	9	9251826	0.002676904	-	A	G	0.002676904	A	0.798808698	B					0.084822472	B	0.359709562	B	0.556565538	B	0.770085131	A	0.3037	A	0.593019647	A	0.268700004	B	0.479521367	B	0.657005301	B	0.057950543				0.86559999		0.874856863	B	0.60769999	C	0.725300014	T	0.713500023	C	0.636200011	T	0.658399999	C	Top	(A/G)
rs4626665	9	9252323	0.104000002																																						0.142199993	G	0.188299999	G	0.104000002	A	0.407499999	A			TOP	(A/G)
rs7863177	9	9253980	0.023979999																																						0.595200002	T	0.294200003	C	0.217500001	C	0.335099995	C	0.1382	T	Top	(A/G)
rs9299090	9	9254932	0.010481759																																						0.6699	T	0.82889998	T	0.023979999	C	0.433499992	C	0.384600014	T	Top	(A/G)
rs10116111	9	9255382	0.010481759	+	C	T	0.530120803	B	0.914891453	B													0.758400023	A			0.638999999	A		B			0.153334166				0.571399987		0.010481759	B												
rs4363255	9	9259284	0.007486095																																						0.487199992	C	0.947300017	T	0.401600003	T	0.455500007	T			Bot	(T/C)
rs10977624	9	9260120	0.007486095	+	C	G	0.130368071	A	0.878984566	A	0.375130292	B	0.513196024	B					0.403873251	B	0.667641746	A			0.275586128	A	0.924000025	A	0.403379567	B	0.263397504	A	0.145506023		0.646640342	A	0.810199976		0.007486095	B												
rs12341573	9	9260379	0.03277	-	A	C	0.263296897	A	0.823305249	B													0.877799988	B			0.288500011	A					0.715880797	A			0.799799979		0.147641994	B												
rs10816081	9	9260436	0.015127038	+	A	G	0.112996121	A	0.107603558	B	0.641278514	A	0.098510777	A	0.119311704	A	0.336293997	B	0.475219976	A	0.702431698	A	0.03277	B	0.673283598	B	0.884299994	A	0.126611325	B	0.3270891	A	0.264333833		0.723279042	B	0.924300015		0.80364419	B												
rs10816082	9	9260642	0	+	C	G	0.353427992	B	0.259693238	A	0.817587259	A	0.65315115	A	0.075349417	B	0.463212482	A	0.015127038	A	0.088574513	B	0.787299991	A	0.907329567	A	0.565400004	A	0.211852104	B	0.386885774	B	0.782399501		0.015927949	A	0.92110002		0.26178288	B												
rs4271024	9	9261443	0	+	A	T	0.080034268	A	0.495426158	B													0.109399997	A			0	B		B			0.044421146				0.726599991		0.943566843	B												
rs4289870	9	9261454	0.081840001																																						0.226899996	G	0.081840001	G	0.450399995	A	0.961700022	G	0.73210001	A	Top	(A/G)
rs4272446	9	9261493	0.030751889																																						0.700900018	T	0.387199998	G	0.157600001	G	0.333099991	G			Bot	(T/G)
rs16929125	9	9262114	0.030751889	+	A	G	0.698289341	B	0.534051574	A													0.551299989	B			0.260100007	B		B			0.089337106				0.863900006		0.030751889	B												
rs7858545	9	9262218	0.063749629	-	C	G	0.224340822	B	0.531052909	A													0.980199993	B			0.25819999	B					0.063749629	A			0.717700005		0.591626267	A												
rs4302899	9	9262841	0.066598111	-	C	T	0.333193286	A	0.758539496	B													0.654100001	A			0.161300004	B		B			0.940995894				0.653999984		0.206621885	A												
rs10977627	9	9263681	0.008219	-	A	G	0.867367427	B	0.108955552	B													0.58039999	B			0.378699988	A		B			0.066598111				0.591199994		0.264147372	B												
rs4563945	9	9267320	0.008219																																						0.917299986	A	0.675599992	G	0.008219	G	0.02574	G	0.085680001	A	Bot	(T/C)
rs4329321	9	9269132	0.027589999	+	G	T					0.635358453	B	0.253453288	A																					0.327899417	A					0.56190002	G	0.90140003	G	0.486900002	G	0.726400018	G	0.027589999	T	Bot	(T/G)
rs4329321	9	9269132	0.027589999	+	G	T	0.215448057	B	0.92745169	A					0.148651696	B	0.09349747	A	0.60814603	A	0.24307747	A	0.286000013	A	0.509250007	A	0.125599995	B	0.743806258	A	0.71109322	B	0.038853211	A			0.406199992		0.120703352	A	0.56190002	G	0.90140003	G	0.486900002	G	0.726400018	G	0.027589999	T	Bot	(T/G)
rs4492438	9	9272982	0.095320001																																						0.395500004	G	0.578800023	G	0.097269997	A	0.102899998	A	0.976700008	A	Bot	(T/C)
rs10122609	9	9273557	0.072682362																																						0.780499995	C	0.404199988	C	0.264800012	C	0.095320001	C	0.777899981	T	Bot	(T/C)
rs17668620	9	9274466	0.072682362	+	C	G	0.666362352	B	0.80447941	A	0.942888949	B	0.492457325	B					0.957916259	B	0.440582456	B	0.439700007	A	0.78702207	A	0.390399993	A	0.072682362	B	0.889243815	B	0.083242256	A	0.392391614	A	1		0.655452915	A												
rs4146134	9	9277321	0.164800003																																						0.861299992	T	0.67110002	C	0.80339998	T	0.458099991	C	0.344599992	C	Bot	(T/C)
rs4146136	9	9277496	0.01708465																																						0.243200004	C	0.164800003	C	0.191200003	T	0.496899992	T	0.795899987	T	Bot	(T/C)
rs4097905	9	9279760	0.01708465	-	A	C	0.01708465	B	0.831602632	B													0.324400008	A			0.3759	B					0.090674318	A			0.31310001		0.386468397	A												
rs7847000	9	9280584	0.537983739	-	C	T	0.625696866	A	0.784217823	A													0.58039999	B			0.592999995	A		B			0.537983739				1		0.631214148	B												
rs10977642	9	9282356	0.505200028																																						0.773699999	G	0.88410002	T	0.887300015	T	0.898599982	G			Bot	(T/G)
rs11795233	9	9282430	0.025322421																																						0.505200028	T	0.939400017	G	0.909099996	G	0.808499992	T			BOT	(T/G)
rs1412885	9	9284304	0.025322421	+	C	T	0.125181497	B	0.651753988	A	0.819241291	A	0.808831467	B					0.618960509	A	0.585413141	A	0.936699987	A	0.549007829	B	0.390399993	A	0.917650299	B	0.479774529	B	0.025322421	A	0.523057172	A	0.810599983		0.703005137	A	0.512700021	T	0.970000029	T	0.67930001	C	0.948800027	T	0.923399985	C	Bot	(T/C)
rs2802278	9	9284415	0.002106241	+	C	T	0.69308416	A	0.760478948	B	0.135012554	B	0.196803817	A					0.516546527	B	0.401032838	B	0.664300025	B	0.796316434	B	0.390399993	B	0.501574157	B	0.295266405	A	0.096476366		0.518451431	B	0.903699994		0.399393777	B												
rs1889105	9	9284996	0.002106241	-	C	T	0.565904079	B	0.002106241	A													0.968200028	B			0.864499986	A					0.367141562	A			0.909699976		0.253261948	A												
rs1412887	9	9285281	0.156399995	-	C	T					0.175852916	A	0.336241712	B																											0.519999981	A	0.966700018	G	0.750500023	G	0.948800027	A	0.905900002	G	Bot	(T/C)
rs2151324	9	9285875	0.045351048																																						0.830799997	T	0.882399976	T	0.156399995	G	0.230900005	G	0.908900023	T	Top	(A/C)
rs9299092	9	9286866	0.045351048	-	C	G					0.045351048	A	0.94131744	B	0.056030871	A																																					

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase
rs1981049	9	9287697	0.080190003													
rs1157904	9	9290084	0.080190003													
rs1930630	9	9294839	0.035197839													
rs12344759	9	9295088	0.035197839	-	A	C	0.228357711	B	0.941990002	B						
rs1333106	9	9297207	0.095040001	-	C	T	0.210018358	A	0.977426576	B						
rs12379153	9	9298230	0.292699993	+	A	G	0.555719518	B	0.769979756	B						
rs1547288	9	9300461	0.062649094													
rs10977651	9	9301838	0.062649094	+	C	T	0.68019868	B	0.902313789	B						
rs2802280	9	9306533	0.008117	+	C	T					0.522253607	A	0.505122852	A	0.063947489	A
rs2802280	9	9306533	0.008117	+	C	T	0.152274509	A	0.659392823	B						
rs953632	9	9307368	0.008117	+	A	G	0.05119332	B	0.162658637	A						
rs10977656	9	9308339	0.03187													
rs1333123	9	9310563	0.100275831													
rs9408754	9	9311951	0.100275831	-	G	T	0.100769856	B	0.121299636	B	0.857261288	A	0.100275831	B	0.236838286	B
rs7019737	9	9312441	0.109934988	-	C	T					0.729799925	B	0.120612299	A		
rs7019737	9	9312441	0.109934988	-	C	T	0.163037214	A	0.109934988	A						
rs7039887	9	9312503	0.020507065	+	G	T					0.522537602	A	0.25313139	B		
rs7036700	9	9312540	0.020507065	-	A	T					0.382263982	B	0.020507065	B		
rs7036700	9	9312540	0	-	A	T	0.086719658	B	0.163628875	B						
rs16929154	9	9312826	0	+	A	C	0.540248319	A	0.644218358	A	0.822193409	B	0.355541931	A		
rs1556520	9	9313563	0.050012296	+	A	G	0.147804429	B	0.22250287	B						
rs4273903	9	9316805	0.362300009													
rs4562383	9	9316943	0.128099993													
rs10816093	9	9317082	0.00242167													
rs2184082	9	9317159	0.00242167	+	A	G					0.648806249	B	0.00242167	A	0.266573101	A
rs2780069	9	9318048	0.014149304	-	A	C					0.257322625	B	0.014149304	A		
rs2780069	9	9318048	0.006652315	-	A	C	0.674078161	A	0.424502225	A						
rs12551223	9	9319715	0.006652315	-	C	T	0.740365945	A	0.047616244	B						
rs10977667	9	9319870	0.003888172	+	C	T					0.076414882	B	0.187882338	A		
rs10977667	9	9319870	0.003888172	+	C	T	0.583626127	A	0.978736462	A						
rs1412870	9	9320772	0.201558747													
rs9644896	9	9324204	0.004465636	+	A	G					0.900091782	B	0.201558747	A		
rs9644896	9	9324204	0.004465636	+	A	G	0.742375291	B	0.560198902	A					0.028584592	A
rs7850556	9	9325455	0.048148216	-	C	T					0.327573262	A	0.227911838	A		
rs7850556	9	9325455	0.048148216	-	C	T	0.300766723	B	0.057075988	A						
rs1332800	9	9327454	0.048680908													
rs12552156	9	9327599	0.048680908	-	G	T	0.048680908	A	0.730003493	B						
rs1332797	9	9328113	0.09490423													
rs1332796	9	9328146	0.064348578	-	A	T	0.221128695	B	0.346366502	A	0.583461361	B	0.847401765	A	0.513023827	A
rs1332795	9	9328215	0.064348578	+	A	T	0.643773119	B	0.804517487	B	0.657803019	A	0.490857123	A	0.254833114	A
rs2065512	9	9328353	0.112300001	+	C	T	0.118052582	A	0.752405188	B						
rs2065511	9	9328417	0.036390467	+	C	T	0.160215819	B	0.440525573	A						
rs2225596	9	9329871	0.015869999	-	A	G	0.036390467	B	0.235843774	A	0.303072151	B	0.365736196	A	0.07242697	A
rs1412881	9	9330127	0.015869999	+	C	T	0.06841708	A	0.82867743	B	0.055701923	A	0.090327841	B	0.061875164	B
rs4742585	9	9330617	0.003536957	+	C	T	0.120852062	B	0.447023193	A						
rs10511523	9	9330949	0.003536957	+	A	G					0.264526926	B	0.003536957	A	0.049186112	B
rs7019201	9	9332490	0	+	C	T	0.718599677	B	0.504493428	B						
rs12001199	9	9333804	0	+	A	T	0.010759957	B	0.716468572	A						
rs16929199	9	9337789	0.243061911													
rs1332803	9	9337920	0.115431631	-	C	G	0.435992509	B	0.446203615	A						
rs1332802	9	9338102	0.092049061	-	A	G	0.115431631	B	0.534166613	A						
rs9299094	9	9338397	0.016944696	+	C	T	0.092049061	B	0.470948953	A						
rs10816097	9	9338853	0	+	C	T	0.452768049	B	0.742943219	A	0.156851501	B	0.296730619	B	0.342608657	A
rs9407419	9	9339567	0	+	C	T	0.629450706	A	0.193750276	B						
rs12156538	9	9339679	0.000775038													
rs7858684	9	9339832	0.000775038	+	C	T	0.423316466	B	0.794666812	B	0.977171992	A	0.964094498	B	0.06887237	B
rs10977673	9	9340608	0.313800007													
rs2151325	9	9341184	0.345600009													
rs9407423	9	9342465	0.224700004													
rs10977679	9	9342861	0.174730714													
rs1547287	9	9344303	0.174730714	-	A	G	0.178381054	B	0.968008676	B						
rs12349439	9	9344757	0.005074401													
rs1332806	9	9345896	0.005074401	-	C	G	0.32381024	B	0.523617288	A	0.874094758	B	0.454015251	A	0.870218316	B
rs1889107	9	9347065	0.098889999													
rs13296976	9	9347444	0.017871014													
rs10114510	9	9348617	0.017871014	-	A	T	0.247135845	B	0.912768185	B					0.379359412	A
rs2001	9	9348960	0.143517219	+	C	G					0.860504906	B	0.632183667	A	0.143517219	A
rs950196	9	9351571	0.005407815	-	A	T					0.992853588	A	0.193035675	A		
rs950196	9	9351571	0.005407815	-	A	T	0.109746364	B	0.056234078	A					0.124656391	A
rs1855217	9	9353616	0.035119999	-	A	G					0.777650751	B	0.22283045	A	0.151435912	A
rs3904501	9	9354637	0.000246886													
rs10977684	9	9358344	0.000246886	-	A	G	0.000246886	A	0.037141704	B	0.886806163	A	0.001297861	B		
rs16929218	9	9358423	0.002205373	-	C	T	0.991187397	A	0.378395777	B	0.002205373	B	0.236514041	B		
rs13297767	9	9365194	0.025066192	+	C	T	0.025066192	B	0.753087479	A						
rs10977686	9	9366272	0.031986427	-	A	C	0.705512321	B	0.829084566	A	0.294838719	B	0.736018684	A		
rs2780078	9	9367679	0.0605													
rs10435829	9	9370737	0.0605	-	A	T	0.636462228	B	0.549345265	B	0.658207749	B	0.770516891	A	0.626993352	B
rs10435830	9	9370781	0.0605	+	A	G	0.25162534	B	0.853622307	A	0.195505782	B	0.191052537	A	0.928080827	A
rs10977690	9	9371760	0.1061													
rs3955073	9	9372331	0.427599996													
rs1889098	9	9373099	0.074856501													
rs10816110	9	9375560	0.074856501	+	A	G					0.594862902	A	0.499675962	A		
rs10977709	9	9375640	0.036770001													
rs4400438	9	9375717	0.035842625	-	C	G	0.094911284	A	0.601319887	B					0.253740249	A
rs10977711	9	9376162	0.009844661	-	C	G	0.81974311	A	0.776459667	B						
rs10124880	9	9376437	0.009844661	+	G	T	0.416303895	A	0.619936935	A	0.204368632	A	0.650316009	A	0.476670831	A
rs4742590	9	9377487	0.05999													
rs16929240	9	9377684	0.05999	+	C	T	0.533112647	B	0.398223776	A						
rs7034580	9	9378143	0.020286551	+	C	T					0.896513353	A	0.13294169	B		
rs10116547	9	9378508	0.020286551	+	C	G	0.363601514	B	0.191730785	B	0.88896752	B	0.553452377	B	0.964568746	B
rs11793389	9	9378678	0.03861	+	C	T	0.194370968	B	0.186627299	B						
rs10977713	9	9379169	0.03861	+	C	T	0.351568275	B	0.082047118	A						
rs7848652	9	9379708	0.02113077	+	C	G	0.674940601	A	0.453048507	A	0.527791154	A	0.109063435	B	0.633937154	A
rs10816114	9	9379992	0.012413953	-	A	C	0.434211171	B	0.148189267	B	0.545150286	B	0.877032842	A	0.43194773	B
rs1007727	9	9380450	0.012413953	-	C	G	0.23099704	A	0.066877924	B	0.814408482	A	0.46715372	B	0.012413953	B
rs1007728	9	9380765	0.016676167	-	A	C	0.161218023	B	0.397415598	B	0.703092538	B	0.271921611	A	0.767067562	B
rs1556521	9	9380815	0.016676167	+	C	T	0.130445007	B	0.164266594	A	0.192562547	B	0.243064628	A	0.820830607	A
rs10816115	9	9381030	0.037313022	-	A	G	0.17275704	B	0.365902788	B	0.223723337	A	0.372182558	A	0.771427365	A
rs10816116	9	9381051	0.074129994	-	A	G	0.188531727	B	0.558473426	B	0.096411777	B	0.074129994	A	0.765092725	B
rs4008110	9	9382235	0.2148													
rs2382004	9	9382387	0.010587601													
rs10977714	9	9383043	0.010587601	-	A	C	0.23675385	A	0.447512461	A	0.481820002	A	0.446619668	B	0.084856365	A
rs10977716	9	9383204	0.035408902	-	A	G					0.946205243	A	0.894871067	B		
rs10977716	9	9383204	0.018971075	-	A	G	0.150682591	A	0.725878288	A					0.480251684	A
rs7871026	9	9383234	0.018971075	-	A	C	0.290448288	B	0.298414217	B	0.188942622	B	0.65357481	A	0.201572626	B
rs7857734	9	9383275	0.017487949	-	C	T	0.166172413	B	0.327042671	B						
rs7871270	9	9383437	0.002194078	-	C	T	0.188337197	A	0.453098685	A	0.77855344	A	0.973569068	B	0.872612738	A

rs_id	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase
rs1981049																								
rs1157904																								
rs1930630																								
rs12344759							0.270500004	B			0.286500007	B		B			0.172314626				0.700699985		0.035197839	A
rs1333106							0.095040001	B			0.446700007	A		B			0.106094491				0.477100015		0.200402386	B
rs12379153							0.984300017	A			0.292699993	A					0.341507471	A			1		0.54665884	B
rs1547288																								
rs10977651							0.678300023	B			0.683899999	A					0.768259391	A			0.644200027		0.062649094	B
rs2802280																								
rs2802280							0.196099997	B			0.008117	A		B			0.366688				0.101000004		0.585914718	B
rs953632							0.196099997	A			0.008117	B					0.279034377	A			0.169699997		0.715823018	B
rs10977656																								
rs1333123																								
rs9408754	0.845159272	A	0.621752038	A	0.348176376	A	0.979399979	A	0.174823029	B	0.245199993	A	0.531276941	A	0.724353964	A	0.156458375	A	0.864355386	B	0.355199993		0.602257868	B
rs7019737																			0.671254021	A				
rs7019737							0.477699995	B			0.316799998	B					0.714038759	A			0.352999985		0.919576991	A
rs7039887																			0.78998457	A				
rs7036700																			0.883364345	A				
rs7036700							0.897599995	B			0.043839999	A					0.063829644	A			0.68870002		0.712418955	B
rs16929154			0.424904735	A	0.710115769	A	0.78640002	A	0.311466875	A	0	B	0.18629869	B	0.087649576	A	0.00599149		0.486808781	B	1		0.355187742	A
rs1556520							0.270200014	A			0.162699997	A					0.050012296	A			0.353899986		0.856884893	B
rs4273903																								
rs4562383																								
rs10816093																								
rs2184082																								
rs2780069																			0.411975292	A				
rs2780069							0.588	B			0.402500004	B		B			0.110852137				0.788600028		0.336156675	A
rs12551223							0.545000017	B			0.01315	A		B			0.006652315				0.1743		0.998595659	A
rs10977667																			0.872815165	B				
rs10977667							0.359699994	A			0.669099987	B		B			0.003888172				1		0.457337805	A
rs1412870																								
rs9644896																			0.642704984	A				
rs9644896	0.810899445	A	0.004465636	B	0.230699812	B	0.954200029	A	0.621068836	B	0.461899996	B	0.532294989	B	0.431736665	B	0.821347586				0.909699976		0.356297315	A
rs7850556																			0.929599245	B				
rs7850556							0.699000001	B			0.5704	B					0.048148216	A			1		0.328816319	A
rs1332800																								
rs12552156											0.343699992	B		B			0.300343185				1		0.534621892	A
rs1332797																								
rs1332796	0.889685864	B	0.579362571	B	0.767398593	B	0.896399975	A	0.99935151	A	0.4648	B	0.123385843	B	0.09490423	B	0.158889172	A	0.663350387	B	1		0.81744149	A
rs1332795	0.183057495	B	0.422526953	B	0.777255791	A	0.689899981	B	0.369980738	B	0.874599993	B	0.085826726	B	0.064348578	B	0.395417602	A	0.418234156	B	0.78460002		0.606970759	A
rs2065512							0.631399989	A			0.5704	A		B			0.350667108				0.909099996		0.330176616	B
rs2065511							0.505299985	B			0.683899999	B					0.688305805	A			1		0.778913642	A
rs2225596	0.359771592	B	0.824938488	A	0.15281144	A	0.781499982	B	0.050301558	A	0.5704	B	0.297598187	B	0.515012109	B	0.752038003	A	0.792630572	B	0.728299975		0.621910075	A
rs1412881	0.84423438	A	0.297227623	B	0.227352034	B	0.569299996	A	0.124672747	B	0.683899999	A	0.823126375	B	0.503628835	A	0.994340449		0.861415106	A	1		0.304177597	B
rs4742585							0.892499983	A			0.5704	B					0.529733468	A			0.820500016		0.924199051	A
rs10511523																								
rs7019201							0.075170003	A			0.635599971	B		B			0.584072635				0.57950002		0.416193589	B
rs12001199							0.25	A			0	A		B			0.807865145				1		0.46561061	A
rs16929199																								
rs1332803							0.472900003	B			0.520600021	A					0.243061911	A			0.926400006		0.747720361	A
rs1332802							0.321999997	B			0.520600021	A					0.221744132	A			0.926400006		0.793809995	A
rs9299094							0.287800014	B			0.520600021	A					0.603279021	A			0.926400006		0.739929515	B
rs10816097	0.245693797	A	0.936471205	A	0.548162198	A	0.528800011	A	0.038052071	A	0.748399973	B	0.825894424	B	0.206486414	A	0.016944696		0.89783479	A	0.763899982		0.03596097	B
rs9407419							0.293000013	B			0	B		B			0.004250912				0.382600009		0.773938681	B
rs12156538																								
rs7858684	0.348556744	A	0.230196678	B	0.973256056	A	0.755100012	A	0.075596344	A	0.149800003	B	0.957449177	B	0.442970825	A	0.000775038		0.844966856	A	0.632600009		0.219340246	B
rs10977673																								
rs2151325																								
rs9407423																								
rs10977679																								
rs1547287							0.847199976	A			0.5704	B					0.174730714	A			1		0.631608916	A
rs12349439																								
rs1332806	0.700395007	A	0.122545622	B	0.185828172	B	0.299800009	B	0.005074401	A	0.691999972	B	0.021785121	B	0.566039184	B	0.769084149	A	0.70521621	B	1		0.151897399	A
rs1889107																								
rs13296976																								
rs10114510	0.208137665	B	0.712049577	B	0.741049402	B	0.425599992	B	0.119379908	A	0.691999972	B	0.109977112	B	0.631666788	B	0.017871014	A			1		0.471788952	A
rs2001																								
rs950196																			0.94765214	B				
rs950196	0.500884665	B	0.005407815	B	0.190175486	B	0.618300021	B	0.822225602	A	0.850700021	B	0.857551421	B	0.766350801	A	0.142756718	A			0.463		0.944720463	B
rs1855217																								
rs3904501																								
rs10977684			0.254467479	A	0.987537467	B			0.290556181	A	0.824699998	A	0.517699128	B	0.494577242	A	0.01975219		0.675026945	B	0.889500022		0.145981135	B
rs16929218			0.250771612	A	0.40941303	B	0.97149998	A	0.354205348	A	0.629000008	B	0.690179188	B	0.023626772	B	0.543112398		0.489196082	B	1		0.405566315	B
rs13297767											0.784300029	B					0.364819727	A			0.890299976		0.099840025	A
rs10977686			0.867223231	B	0.269184565	B	0.358099997	B	0.031986427	A	0.289200008	A	0.384303364	B	0.081903415	A	0.059268522		0.352053407	A	1		0.643461158	B
rs2780078																								
rs10435829	0.548307673	B	0.19281625	A	0.320718023	A	0.234799996	A	0.832259527	A	0.0605	A	0.920558884	A	0.672871283	A	0.504988058	A	0.119120054	B	0.094130002	B	0.339073024	B
rs10435830	0.49434176	A	0.100909259	A	0.957807681	B	0.234799996	A	0.836200799	A	0.0605	A	0.819383905	B	0.833885254	A	0.071225038	A	0.263116068	B	0.09516	B	0.236217886	B
rs10977690																								
rs3955073																								
rs1889098																								
rs10816110																			0.074856501	A				
rs10977709																								
rs4400438	0.189417946	A	0.589306582	B	0.651629274	B	0.126699999	B	0.045811441	B	0.080239996	B	0.514564392	B	0.888698001	B	0.103569978				0.036770001		0.280328319	A
rs10977711											0.295700014	B					0.035842625	A			1		0.573633323	A
rs10124880	0.402550786	A	0.576089288	B	0.602855769	B	0.400099993	B	0.787841297	B	0.045120001	B	0.426996519	B	0.896241189	A	0.009844661		0.048216611	A	0.09516	A	0.950991472	A
rs4742590																								
rs16929240							0.693000019	B			0.161200002	A					0.305699631	A			0.05999	B	0.960454139	B
rs7034580																			0.246746971	A				
rs10116547	0.680049604	B	0.631497619	A	0.245631007	A	0.555899978	B	0.972010595	A	0.07965	B	0.84989901	B	0.091968373	A	0.020286551		0.266247306	B	0.841000021		0.683618944	B
rs11793389							0.33829999	B			0.162599996	A					0.286271338	A			1		0.906381943	A
rs10977713							0.730599999	B			0.407999992	A					0.316756989	A			0.681200028		0.090682463	A
rs7848652	0.252450473	A	0.892677685	A	0.362768239	B	0.479499996	A	0.230430845	A	0.07965	A	0.512459032	A	0.904933354	B	0.156120821	A	0.096513403	A	1		0.648587291	A
rs10816114	0.315806677	B	0.623495595	B	0.303316169	A	0.457599998	B	0.772246687	B	0.07965	B	0.438904928	B	0.294113871	A	0.02113077		0.235818037	B	1		0.61726295	B
rs1007727	0.025010091	A	0.302651752	A	0.315177039	B	0.655700028	A	0.929225266	B	0.86589998	A	0.247367072	B	0.361192555	A	0.496487282		0.066604933	B	0.351500005		0.496689893	B
rs1007728	0.309593002	B	0.219248597	B	0.067390802	A	0.555899978	B	0.860406481	A	0.07965	B	0.141166083	B	0.39659772	A	0.170834005		0.167337653	B	1		0.583626799	B
rs1556521	0.737426828	A	0.937883344	B	0.82737191	B	0.913100004	B	0.047945001	B	0.995999992	B	0.879487742	B	0.183642643	B	0.166915305	A	0.781597548	B	0.063869998	A	0.016676167	B
rs10816115	0.176625152	B	0.937002881	B	0.778255594	B	0.555899978	B	0.305855131	A	0.09482	B	0.896705684	B	0.120761411	A	0.037313022		0.075908976	B	0.92019999		0.527266465	B
rs10816116	0.878596779	B	0.707961989	B	0.574238149	A	0.532700002	B	0.523910322	A	0.109200001	B	0.88045782	B	0.890654004	A	0.235641884		0.32259198	B	1		0.77589889	B
rs4008110																								
rs2382004																								
rs10977714	0.16257908	A	0.865545668	B	0.42424789	A	0.457599998	A	0.921227919	B	0.109200001	A	0.926493222	A	0.930793951	A	0.010587601	A	0.180861353	A	1		0.947127127	A
rs10977716																			0.447217689	A				
rs10977716	0.114430049	A	0.786284858	A	0.422945759	A	0.457599998	A	0.980778745	B	0.126100004	A	0.641982404	A	0.720142932	A	0.035408902	A			1		0.604407164	A
rs7871026	0.23737437	B	0.899626671	B	0.729994064	A	0.508599997	B	0.799663585	A	0.109200001	B	0.954464656	B	0.478110233	B	0.018971075		0.517071248	B	1		0.517740262	B
rs7857734							0.368499994	B			0.109200001	B		B			0.037525306				0.92019999		0.764018697	B
rs7871270	0.213674472	A	0.368597476	A	0.639492012	B	0.457599998	A	0.520438883	A	0.109200001	A	0.061671846	A	0.77248888	A	0.017487949	A	0.624504508	A	1		0.647749356	A

rs_id	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs1981049	0.648599982	T	0.840699971	C	0.148100004	C	0.616100013	C	0.217999995	T	Top	(A/G)
rs1157904	0.908699989	A	0.664900005	A	0.363299996	A	0.968599975	A	0.080190003	C	Bot	(T/G)
rs1930630	0.792599976	G	0.807699978	G	0.417899996	A	0.658699989	A	0.658800006	A	Top	(A/G)
rs12344759												
rs1333106												
rs12379153												
rs1547288	0.808300018	C	0.472900003	T	0.76849997	T	0.765600026	C	0.425500006	C	Top	(A/G)
rs10977651	0.333200008	T	0.238999993	T	0.381199986	C	0.839399993	T	0.944100022	T	Bot	(T/C)
rs2802280												
rs2802280												
rs953632												
rs10977656	0.716000021	A	0.2491	A	0.168899998	A	0.03187	A			Top	(A/G)
rs1333123	0.771399975	G	0.977199972	G	0.852999985	T	0.864199996	T	0.415899992	T	Top	(A/C)
rs9408754	0.863900006	A	0.839900017	A	0.814800024	C	0.781400025	A	0.537599981	C	Bot	(T/G)
rs7019737												
rs7019737												
rs7039887												
rs7036700												
rs7036700												
rs16929154												
rs1556520												
rs4273903	0.928200007	A	0.996900022	C	0.664600015	C	0.944599986	C	0.58099997	C	Top	(A/C)
rs4562383	0.585799992	C	0.667900026	C	0.533900023	C	0.362300009	C			TOP	(A/C)
rs10816093	0.857900024	G	0.975899994	A	0.447699994	G	0.128099993	G			BOT	(T/C)
rs2184082	0.897400022	T	0.938399971	T	0.666999996	C	0.907999992	C			Top	(A/G)
rs2780069												
rs2780069												
rs12551223												
rs10977667												
rs10977667												
rs1412870	0.544099987	G	0.342900008	G	0.386400014	G	0.245399997	G			Top	(A/G)
rs9644896												
rs9644896												
rs7850556												
rs7850556												
rs1332800	0.379700005	T	0.261200011	T	0.236300007	C	0.264899999	C			Bot	(T/C)
rs12552156												
rs1332797	0.604099989	A	0.537299991	A	0.448000014	C	0.865999997	A	0.429899991	A	Top	(A/C)
rs1332796												
rs1332795												
rs2065512												
rs2065511	0.200599998	G	0.226400003	G	0.112300001	A	0.444700003	A	0.526199997	A	Bot	(T/C)
rs2225596												
rs1412881	0.38530001	A	0.348100007	A	0.015869999	G	0.097970001	G	0.921400011	G	Top	(A/G)
rs4742585												
rs10511523												
rs7019201												
rs12001199												
rs16929199					0.938300014	T	0.716300011	C			Top	(A/G)
rs1332803												
rs1332802	0.723399997	A	0.542500019	A	0.782000005	G	0.83829999	A			Bot	(T/C)
rs9299094												
rs10816097	0.372900009	C	0.391799986	C	0.888400018	C	0.652800024	C			Bot	(T/C)
rs9407419					0.218099996	T	0.223800004	T			Bot	(T/C)
rs12156538	0.897800028	A	0.565900028	C					0.178800002	C	Bot	(T/G)
rs7858684												
rs10977673	0.576799989	G	0.451700002	G	0.690999985	G	0.339300007	G	0.313800007	T	Top	(A/C)
rs2151325	0.554899991	G	0.367799997	G	0.517099977	A	0.92930001	A			Top	(A/G)
rs9407423					0.457800001	T	0.345600009	T			Top	(A/G)
rs10977679	0.367599994	A	0.224700004	A	0.720499992	A	0.386299998	A			TOP	(A/G)
rs1547287												
rs12349439					0.397799999	C	0.819500029	C			Bot	(T/C)
rs1332806												
rs1889107	0.640999973	G	0.809700012	G	0.203099996	A	0.098889999	A	0.555400014	A	Top	(A/G)
rs13296976	0.452899993	G	0.265700012	G	0.122699998	G	0.1087	G	0.888499975	A	Bot	(T/C)
rs10114510												
rs2001												
rs950196												
rs950196												
rs1855217	0.726400018	A	0.692700028	A	0.035119999	G	0.083219998	G	0.518299997	A	Top	(A/G)
rs3904501	0.534799993	G	0.757499993	G	0.041790001	T	0.07976	T	0.966300011	T	Top	(A/C)
rs10977684												
rs16929218	0.08365	A	0.717100024	A	0.159700006	G	0.720000029	G			BOT	(T/C)
rs13297767												
rs10977686												
rs2780078	0.180000007	C	0.594900012	C	0.296200007	A	0.129899994	A	0.537199974	C	Top	(A/C)
rs10435829												
rs10435830												
rs10977690	0.408800006	C	0.966199994	C	0.115699999	T	0.1061	T			Top	(A/G)
rs3955073	0.427599996	A	0.951099992	G	0.550499976	G	0.55400002	G	0.741299987	G	Top	(A/G)
rs1889098	0.821699977	G	0.890399993	A	0.787899971	A	0.886200011	A			TOP	(A/G)
rs10816110												
rs10977709	0.408800006	T	0.980599999	C	0.423900008	C	0.579599977	C	0.805000007	C	Top	(A/G)
rs4400438												
rs10977711												
rs10124880												
rs4742590	0.067910001	T	0.087909997	T	0.206799999	T	0.180399999	T			TOP	(A/G)
rs16929240												
rs7034580												
rs10116547												
rs11793389	0.719699979	C	0.635999978	T	0.813000023	T	0.772899985	C			Bot	(T/C)
rs10977713	0.754000008	C	0.460000008	C	0.03861	T	0.132699996	T	0.315200001	C	Top	(A/G)
rs7848652												
rs10816114	0.391000003	T	0.944700003	G	0.610499978	T	0.655799985	T	0.186900005	T	Bot	(T/G)
rs1007727												
rs1007728												
rs1556521												
rs10816115												
rs10816116												
rs4008110	0.391000003	C	0.944700003	T	0.596099973	C	0.743499994	C	0.231700003	C	Bot	(T/C)
rs2382004	0.849799991	G	0.987699986	T	0.638899982	T	0.831900001	T	0.2148	G	Bot	(T/G)
rs10977714												
rs10977716												
rs10977716												
rs7871026												
rs7857734	0.376100004	G	0.994300008	A	0.548300028	G	0.655799985	G			TOP	(A/G)
rs7871270												

Continued on next page

Supplementary Table S1. ***Continued.***

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidaii_aa_P	nidaii_aa_Phase	nidaii_ea_P	nidaii_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase
rs11795240	9	9383744	0.002194078	+	A	G	0.015817255	B	0.176981822	B	0.015544919	B	0.002194078	A	0.622502008	A
rs9332452	9	9383975	0.008368626	+	C	T					0.008368626	B	0.008636484	A	0.018724572	B
rs10977719	9	9384255	0.109200001	-	C	G					0.669746993	B	0.46518832	A		
rs10977723	9	9384504	0.017418641	+	C	T	0.342887849	A	0.282039637	A	0.216990282	A	0.13566564	B	0.86708844	B
rs2151322	9	9384684	7.16205E-05	-	A	G	0.853727359	A	0.240055248	A					0.108074778	B
rs16929280	9	9384902	7.16205E-05	+	A	G	0.905213309	A	0.883232708	A	0.318195825	B	0.809107018	B	0.925738663	B
rs2184077	9	9385077	0.148800001													
rs10977724	9	9385571	0.025945912	+	C	G					0.669291593	B	0.172535402	A		
rs10118118	9	9385912	0.025945912	-	C	G	0.03528975	B	0.505787024	B	0.645030827	B	0.025945912	A		
rs10977725	9	9386428	0.148599997													
rs10816121	9	9386918	0.1479													
rs7848297	9	9387312	0.1479													
rs10511525	9	9388459	0.03059	+	C	T					0.883076993	A	0.165817493	A	0.581205659	B
rs1332798	9	9389018	0.01474													
rs1412722	9	9390177	0.01474													
rs2382005	9	9391487	0.107758759	-	C	T	0.350474121	B	0.119106716	A	0.578198722	B	0.906314472	A	0.402774223	B
rs10739187	9	9392523	0.150199994													
rs1333109	9	9392765	0.113057812													
rs10739188	9	9393454	0	+	C	T					0.113057812	A	0.524819923	B		
rs10121105	9	9394012	0	+	G	T	0.470880892	B	0.040484505	A						
rs10118330	9	9394090	0.021516759	-	C	T	0.910525949	B	0.281427074	A						
rs10759062	9	9394584	0.021516759	-	A	G	0.91888744	A	0.253689373	B	0.353039407	A	0.928889661	B	0.063348184	A
rs10759063	9	9394813	0.000793694	+	A	G	0.537683576	B	0.277755211	B						
rs10816124	9	9394896	0.000793694	-	G	T	0.000793694	B	0.886792799	B	0.713946125	B	0.784324854	A		
rs10759064	9	9395003	0.010064219	-	C	T	0.62981475	B	0.54257209	B					0.052421877	B
rs1475680	9	9395316	0.001606908	-	A	G	0.353465725	B	0.074022282	A	0.872055277	A	0.87514658	A	0.018139716	B
rs10122096	9	9395431	0.001606908	+	A	G	0.120324637	B	0.106163965	A					0.001606908	B
rs10977735	9	9399606	0.02829													
rs914803	9	9399881	0.02829													
rs914804	9	9400073	0.002381907	+	C	G					0.137005104	B	0.185101782	A		
rs914804	9	9400073	0.002381907	+	C	G	0.045005041	B	0.938365522	A					0.002381907	B
rs1475690	9	9401107	0.014010914	+	A	G	0.014010914	B	0.164746436	A						
rs12346216	9	9404834	0.014197701	-	C	T	0.834401734	B	0.124965035	B						
rs11790368	9	9404893	0.014197701	-	A	T	0.090251892	A	0.031577524	A	0.404657381	A	0.077330198	A		
rs1556526	9	9404923	0.024319674	-	C	G	0.039550791	A	0.308874786	B						
rs7035070	9	9406161	0.00434378	+	C	T	0.882179234	B	0.024319674	A						
rs1333111	9	9406962	0.00434378	-	C	T	0.00434378	B	0.288333237	A	0.175730051	B	0.148169345	A	0.604185016	A
rs1333113	9	9408277	0.005061													
rs7853243	9	9408778	0.015669678													
rs1556463	9	9409666	0.015669678	-	A	G					0.259113799	A	0.185425428	B	0.015669678	B
rs7039878	9	9410090	0.005128464								0.302018351	B	0.071165188	A		
rs1332204	9	9410735	0.005128464								0.434784073	A	0.005128464	B	0.326198317	B
rs1332204	9	9410735	0.010267262	+	C	T	0.052826625	B	0.694608078	A					0.310552517	B
rs4740981	9	9410830	0.000193994	-	A	G					0.239739843	A	0.40255856	B	0.189411666	B
rs4742595	9	9410915	0.000193994	-	A	G					0.18933668	B	0.000193994	A	0.226343504	A
rs1889102	9	9411324	0.002385615	+	A	C					0.290930383	B	0.002385615	A	0.036832096	A
rs10759068	9	9411891	0.002861608		A	G					0.167858639	B	0.301964089	A		
rs4342663	9	9412159	0.002323246	-	A	G	0.195633431	A	0.766895924	A						
rs10816127	9	9412544	0.002323246	+	C	G	0.041621924	A	0.941896771	B	0.026058104	A	0.777572117	A	0.002323246	A
rs13287572	9	9412859	0.045581487	+	A	C	0.696985915	B	0.045581487	B	0.358898906	B	0.599392887	A		
rs1412727	9	9413523	0.00442934	+	A	G	0.069312013	A	0.938190735	B	0.216858257	A	0.488036662	B	0.526393566	A
rs11792435	9	9413558	0.00442934	+	A	G	0.16451924	B	0.087953393	B						
rs3949639	9	9413704	0.007185993	+	C	T					0.387816931	B	0.875741193	A		
rs3949639	9	9413704	0.007185993	+	C	T	0.007185993	B	0.030748978	A					0.298184426	B
rs7043400	9	9413938	0.014891055	-	A	G					0.059116167	A	0.369970656	B		
rs7043400	9	9413938	0.002274284	-	A	G	0.202610337	A	0.727341802	A					0.014891055	A
rs10977739	9	9414519	0.002274284	-	C	G	0.023741291	B	0.710086892	A	0.014095214	B	0.590261228	A	0.067212893	B
rs4742596	9	9414989	0.003409165	-	C	T	0.090869983	A	0.971542521	B	0.044993775	A	0.923084066	A	0.129230189	A
rs1105505	9	9415285	0.003409165	-	C	G	0.87499354	B	0.003409165	B	0.577732224	B	0.792337228	B	0.647778801	B
rs3858066	9	9415605	0													
rs10977743	9	9422824	0	-	C	T	0.001510335	B	0.815547791	A						
rs17829640	9	9423131	0.005014968	+	A	G					0.619597009	A	0.22626132	B		
rs17829640	9	9423131	0.00336886	+	A	G	0.222939165	A	0.036638518	B						
rs17767692	9	9423671	0.00336886	+	C	G	0.339817405	A	0.667870317	B	0.222153972	A	0.15314136	A	0.973377497	B
rs7044915	9	9426044	0.018100001													
rs1412877	9	9427369	0.172619467	-	A	G					0.542098567	A	0.323658281	A	0.77068528	A
rs1412875	9	9427436	0.014571111	-	C	T					0.447350803	B	0.478327055	A	0.172619467	A
rs1412875	9	9427436	0.006928441		C	T					0.261798845	B	0.014571111	A		
rs1412875	9	9427436	0.006928441	-	C	T	0.006928441	B	0.048349669	A					0.759795642	A
rs1412873	9	9427674	0.102089488													
rs4142435	9	9429700	0.102089488	+	A	G	0.102089488	A	0.916611146	A						
rs10977747	9	9430057	0.119499996													
rs2382010	9	9430094	0.03444													
rs16929395	9	9430664	0.03444	+	A	C					0.068104592	B	0.334858788	B		
rs1360593	9	9430838	0.122100003													
rs1360591	9	9431003	0.451250967													
rs10977751	9	9432741	0.278800011	+	A	C	0.807564162	B	0.579143706	A						
rs10977755	9	9434744	0.007278592	-	A	C	0.902582768	B	0.776745782	A						
rs17768428	9	9435270	0.007278592	-	A	C	0.042465772	B	0.24323914	A	0.007278592	B	0.589897682	A	0.405295749	B
rs1332212	9	9436468	0.215122668													
rs10977759	9	9438445	0.003738504	-	A	C	0.593219414	B	0.523358014	B	0.278132003	A	0.876189114	B	0.965816274	B
rs10977768	9	9443879	0.003738504	-	C	G	0.736141926	A	0.455799157	A	0.654010278	A	0.41497371	B	0.059889072	B
rs1332810	9	9444258	0.029311151													
rs1332809	9	9444340	0.029311151	+	C	G	0.191484917	B	0.957618021	A					0.99601584	A
rs1332808	9	9444411	0.039136062	+	A	C	0.131096253	B	0.246197855	A	0.039136062	B	0.748731562	A		
rs10816129	9	9445711	0.034651429													
rs7856640	9	9447189	0.034651429	-	A	G					0.956360142	B	0.034651429	A		
rs10977777	9	9448328	0.070913338	+	A	G	0.565366807	B	0.28812914	A	0.293855968	B	0.070913338	A	0.592994043	A
rs1412872	9	9448505	0.00677991	-	A	G					0.549849701	A	0.86961705	A		
rs1412872	9	9448505	0.00677991	-	A	G	0.340735759	A	0.167772627	B						
rs1333107	9	9449009	0.095119998	+	C	T					0.467767604	B	0.817944253	B	0.638953684	B
rs1333108	9	9449099	0.296777524													
rs7857812	9	9450595	0.044515621		G	T					0.758888847	A	0.296777524	A		
rs7857812	9	9450595	0.044515621	+	G	T	0.931930349	A	0.587090209	A					0.610804939	A
rs7871096	9	9453556	0.025770126	+	C	T					0.431878788	B	0.651996693	A		
rs10977783	9	9454090	0.025770126	+	C	G	0.3151842	B	0.788722618	A						
rs10491614	9	9454410	0.03072075	+	C	T					0.059806116	B	0.72313037	B	0.582508071	B
rs10491613	9	9454561	0.03072075	-	A	C					0.841620181	A	0.03072075	B		
rs955474	9	9455190	0.100977341	+	C	G					0.447794717	A	0.179686079	B	0.789479731	A
rs955474	9	9455190	0.100977341	+	C	G	0.220293296	A	0.100977341	B	0.397348768	A	0.237458101	B	0.773591308	A
rs10977784	9	9455641	0.024763433	+	C	T					0.209977505	A	0.362375111	A		
rs10977785	9	9455775	0.0026888	+	C	T					0.563851953	A	0.024763433	B		
rs10977785	9	9455775	3.96929E-05	+	C	T	0.142562444	A	0.445091632	B						
rs10759076	9	9455841	3.96929E-05	+	A	G	0.680692408	B	0.390095192	B						
rs12350794	9	9455857	0.188285598	+	C	T	0.214150935	B	0.275528833	B						
rs12338165	9	9455911	0.208911687	+	C	T					0.279440669	A	0.208911687	B		
rs13286239	9	9457680	0.028803484													

rs_id	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase
rs11795240	0.905366977	A	0.759769849	A	0.659044884	A	0.079999998	B	0.070161624	B	0.752300024	B	0.38553805	B	0.081309834	A	0.303704223		0.101449019	B
rs9332452	0.110844932	A	0.778812094	B	0.564090267	A			0.237143727	B			0.631279822	B	0.465015272	A			0.305888627	B
rs10977719																			0.377923311	B
rs10977723	0.499934675	A	0.788121677	A	0.287769824	B	0.513000011	A	0.270132709	B	0.109200001	A	0.196320621	A	0.381557293	B	0.198563183	A	0.14282186	A
rs2151322	0.017418641	A	0.600841903	A	0.799047379	B	0.774399996	A	0.261112859	A	0.870000005	A	0.493172278	B	0.304142461	A	0.601086125			
rs16929280	0.886706504	B	0.138731783	A	0.752293673	B	0.364300013	A	0.046137453	A	0.1162	B	0.866620934	A	0.32135156	B	7.16205E-05	A	0.942647077	B
rs2184077																				
rs10977724																			0.168710189	B
rs10118118			0.622652574	B	0.562178106	A			0.222616028	B	0.050330002	B	0.886764179	B	0.940240971	B	0.825131358		0.979373003	A
rs10977725																				
rs10816121																				
rs7848297																				
rs10511525																				
rs1332798																				
rs1412722																				
rs2382005	0.810332998	A	0.721674598	B	0.440097595	A	0.406199992	B	0.95004263	A	0.848100007	B	0.651277261	B	0.337094919	B	0.468520412		0.556986964	B
rs10739187																				
rs1333109																				
rs10739188																			0.746412856	A
rs10121105							0.655200005	A			0	A					0.072344602	A		
rs10118330							0.891700029	B			0.942900002	A		B			0.052388568			
rs10759062	0.13870937	B	0.58081111	B	0.125420994	B	0.785899997	A	0.284411395	A	0.848100007	A	0.55888859	B	0.569621174	A	0.985455436		0.412580055	B
rs10759063							0.597899973	B			0.209999993	A					0.795701957	A		
rs10816124			0.449120142	A	0.243192404	A			0.063805696	B	0.100400001	B	0.430209689	B	0.317935634	B	0.61640187		0.087466242	A
rs10759064	0.180740174	A	0.947391708	B	0.854649444	B	0.430099994	A	0.335260465	B	0.25940001	A	0.448940511	A	0.257439503	B	0.010064219	A		
rs1475680	0.377986769	A	0.504464048	A	0.184501809	A	0.229300007	B	0.244793469	B	0.848100007	B	0.3335565	B	0.917728517	A	0.962763576		0.565115177	A
rs10122096	0.340016129	A	0.371584316	A	0.814412425	B	0.266400009	B	0.482637442	B	0.848100007	B	0.637214456	B	0.099984058	B	0.729266283			
rs10977735																				
rs914803																				
rs914804																			0.575402658	A
rs914804	0.010015744	A	0.856906783	B	0.014411541	B	0.352100015	B	0.507132086	A	0.266499996	A	0.150998636	A	0.357704955	A	0.353158794	A		
rs1475690							0.1752	B			0.995999992	B					0.083473121	A		
rs12346216											0.069470003	B		B			0.014421338			
rs11790368			0.622558495	A	0.061863747	B	0.525200009	A	0.412751012	B	0.02634	B	0.122998448	B	0.539758954	A	0.419602401		0.014197701	A
rs1556526							0.926699996	A			0.995999992	A		B			0.497143959			
rs7035070							0.300399989	B			0.285600007	A					0.913369406	A		
rs1333111	0.703322567	B	0.767269225	B	0.14327427	A	0.339300007	B	0.338486117	A	0.344999999	A	0.589236775	B	0.688199555	A	0.990051287		0.155588631	B
rs1333113																				
rs7853243																				
rs1556463																				
rs7039878																				
rs1332204																				
rs1332204	0.979260138	B	0.685639002	A	0.309412704	A	0.400299996	B	0.329051389	B	0.147599995	A	0.806042986	B	0.230854353	B	0.010267262	A		
rs4740981																				
rs4742595																				
rs1889102																				
rs10759068																			0.161247398	B
rs4342663							0.676800013	A			0.202700004	B		B			0.002861608			
rs10816127	0.990253947	A	0.868199999	A	0.099053654	B	0.313699991	A	0.763869571	B	0.221499994	B	0.802100029	B	0.396263114	B	0.145189226		0.147127075	A
rs13287572			0.186574069	B	0.861313398	A			0.579930668	A	0.069470003	B	0.217731849	B	0.655076831	A	0.240041442		0.819132857	A
rs1412727	0.166978227	B	0.649763538	B	0.33065032	A	0.242300004	A	0.657573436	B	0.221499994	B	0.485945519	B	0.298672195	B	0.471095784		0.157320169	A
rs11792435							0.249300003	B			0.028379999	A					0.00442934	A		
rs3949639																			0.267846885	B
rs3949639	0.099413286	A	0.661249821	A	0.06180105	B	0.640500009	B	0.786616356	B	0.221499994	A	0.996460152	B	0.827411709	A	0.033890159	A		
rs7043400																			0.665908374	A
rs7043400	0.210336004	B	0.72758236	B	0.688409858	A	0.242300004	A	0.808391676	B	0.221499994	B	0.39880683	B	0.602346136	B	0.63915781			
rs10977739	0.230931163	A	0.599724881	A	0.57355989	B	0.315600008	B	0.256195855	B	0.221499994	A	0.589503315	A	0.589591866	A	0.438291279	A	0.002274284	B
rs4742596	0.218300032	B	0.919746949	A	0.556390503	B	0.903800011	A	0.751625382	B	0.277200013	B	0.318333503	B	0.705582582	B	0.347824767		0.012291346	A
rs1105505	0.299564297	A	0.795203023	B	0.356402184	B	0.166800007	B	0.88090279	B	0.837300003	A	0.569524463	B	0.189044224	B	0.704141347	A	0.595237525	B
rs3858066																				
rs10977743											0	A					0.01015301	A		
rs17829640																			0.517435859	B
rs17829640							0.305900008	B			0.245299995	A					0.005014968	A		
rs17767692	0.70025992	B	0.45801868	A	0.20026424	B	0.190799996	A	0.315641277	A	0.156599999	B	0.393677104	B	0.618864501	A	0.209352581		0.00336886	A
rs7044915																				
rs1412877																				
rs1412875																				
rs1412875																			0.364466646	B
rs1412875	0.377667687	B	0.037683059	B	0.961810398	B	0.372000009	B	0.833311691	B	0.673600018	A	0.888429349	B	0.10742958	A	0.717440762	A		
rs1412873																				
rs4142435							0.251700014	A			0.600199997	B		B			0.311203249			
rs10977747																				
rs2382010																				
rs16929395																			0.961318041	B
rs1360593																				
rs1360591																				
rs10977751							0.511399984	B			0.849500001	A					0.451250967	A		
rs10977755							0.763300002	B			0.278800011	B					0.352792275	A		
rs17768428	0.923909592	A	0.775488489	A	0.431493782	B	0.991999984	A	0.862854772	A	0.532000005	A	0.231351002	B	0.425555598	B	0.171846823		0.306857979	A
rs1332212																				
rs10977759	0.823048565	B	0.713795685	A	0.765987103	B	0.237800002	A	0.430808799	A	0.275400013	A	0.59760025	B	0.649086354	A	0.215122668		0.360597525	A
rs10977768	0.756797261	A	0.47439443	B	0.474437786	B	0.611699998	A	0.653993176	A	0.203299999	A	0.625225546	B	0.980630327	A	0.003738504		0.79628695	A
rs1332810																				
rs1332809	0.88008201	A	0.029311151	A	0.761731332	A	0.443800002	B	0.270795731	B	0.278800011	B	0.132271095	A	0.245348451	B	0.145199004	A		
rs1332808			0.127443356	A	0.326812232	A	0.415399998	B	0.045221984	B	0.198899999	B	0.686417953	A	0.349014741	B	0.123118465	A	0.897651621	B
rs10816129																				
rs7856640																			0.297092237	B
rs10977777	0.894027013	B	0.844092115	A	0.927145501	B	0.611699998	B	0.821528411	B	0.142499998	B	0.865678452	A	0.634217339	B	0.180081156	A	0.56936237	B
rs1412872																			0.736617134	A
rs1412872							0.809700012	A			0.547800005	A		B			0.00677991			
rs1333107																				
rs1333108																				
rs7857812																			0.744332398	A
rs7857812	0.819993054	B	0.071762791	B	0.848318383	B	0.120300002	B	0.672764996	A	0.147300005	B	0.167740734	B	0.469268533	A	0.044515621	A		
rs7871096																				
rs10977783							0.923200011	B			0.35800001	B					0.025770126	A		
rs10491614																				
rs10491613																				
rs955474																				
rs955474	0.633799408	A	0.492377278	A	0.779414377	A	0.506699979	A	0.29790972	A	0.467400014	A	0.651820013	B	0.695873519	A	0.136357406		0.247055528	A
rs10977784																			0.302750292	B
rs10977785																			0.917453917	B
rs10977785			0.372716668	A	0.451553228	B	0.289600015	A	0.0026888	A	0.142499998	A	0.579484336	B	0.833190652	A	0.236030555			
rs10759076							0.037870001	B			0.582400024	B		B			3.96929E-05			
rs12350794			0.406088245	B	0.819072496	B	0.726499975	B	0.188285598	B	0.233700007	B	0.28400827	B	0.68207105	B	0.488338068	A		
rs12338165																			0.665453667	A
rs13286239																				

rs_id	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs11795240	0.903100014		0.126877602	A	0.859300017	G	0.151500002	G	0.632399976	G	0.943599999	A			TOP	(A/G)
rs9332452																
rs10977719																
rs10977723	1		0.578430864	A												
rs2151322	0.750500023		0.354384395	A	0.695299983	C	0.155399993	C	0.363299996	T	0.53579998	T	0.395700008	C	Bot	(T/C)
rs16929280	0.630900025		0.901406223	A												
rs2184077					0.618099988	T	0.148800001	T	0.436500013	C	0.451700002	C			Bot	(T/C)
rs10977724																
rs10118118	1		0.028651229	A												
rs10977725					0.690500021	G	0.180000007	G	0.978399992	A	0.506099999	G	0.446799994	A	Top	(A/G)
rs10816121					0.854600012	C	0.148599997	C	0.646600008	C	0.992399991	T	0.4736	T	Bot	(T/C)
rs7848297					0.610800028	C	0.1479	T	0.190699995	C	0.330900013	C			Top	(A/G)
rs10511525																
rs1332798					0.819199979	T	0.494199991	T	0.03059	C	0.083059996	C	0.293099999	T	Bot	(T/C)
rs1412722					0.161899999	A	0.01474	A	0.158500001	C	0.256000012	C			Top	(A/C)
rs2382005	0.119000003		0.107758759	B	0.870000005	G	0.999199987	G	0.980199993	A	0.8222	A	0.214599997	G	Top	(A/G)
rs10739187					0.9648	G	0.891600013	A	0.941100001	A	0.903699994	G	0.173899993	G	Top	(A/G)
rs1333109					0.591899991	G	0.933499992	T	0.222599998	G	0.150199994	G			TOP	(A/C)
rs10739188																
rs10121105	1		0.870405372	B												
rs10118330	1		0.953323749	B												
rs10759062	0.1611		0.021516759	A												
rs10759063	0.278200001		0.040572488	B	0.486600012	A	0.333299995	A	0.611299992	G	0.961799979	A	0.495799989	G	Top	(A/G)
rs10816124	1		0.074772835	A	0.511900008	A	0.077529997	A	0.207399994	A	0.136099994	A	0.370599985	C	Bot	(T/G)
rs10759064	0.098410003	A	0.253041882	B												
rs1475680	0.1611		0.168783013	B	0.875100017	A	0.877699971	A	0.942600012	G	0.796899974	A	0.214499995	A	Top	(A/G)
rs10122096	0.097560003	A	0.451387219	B												
rs10977735					0.715300024	T	0.946699977	G	0.595799983	G	0.959500015	G			Top	(A/C)
rs914803					0.765399993	C	0.968500018	C	0.395900011	C	0.179900006	C	0.02829	A	Top	(A/C)
rs914804																
rs914804	0.195600003		0.126135852	B												
rs1475690	0.252200007		0.115254945	B												
rs12346216	1		0.14770885	A												
rs11790368	1		0.820848012	A												
rs1556526	0.251700014		0.171236763	A												
rs7035070	1		0.382541233	A												
rs1333111	1		0.888421685	B	0.265700012	G	0.100599997	G	0.124799997	A	0.263599992	A	0.227699995	G	Top	(A/G)
rs1333113					0.443699986	T	0.421600014	T	0.005061	C	0.03136	C			Bot	(T/C)
rs7853243					0.950399995	T	0.818599999	C	0.570800006	C	0.852699995	C	0.3574	T	Bot	(T/C)
rs1556463					0.913100004	G	0.603399992	G	0.421799988	A	0.466100007	A	0.407900006	A	Top	(A/G)
rs7039878																
rs1332204																
rs1332204	0.160899997		0.580423699	B												
rs4740981																
rs4742595																
rs1889102																
rs10759068																
rs4342663	0.066239998	B	0.510151766	A	0.975600004	T	0.667500019	T	0.05669	C	0.00869	C			Bot	(T/C)
rs10816127	0.328999996		0.557859496	A												
rs13287572	1		0.051758308	A												
rs1412727	0.328999996		0.586001295	A	0.842700005	T	0.503700018	T	0.626299977	C	0.299699992	C	0.291999996	C	Bot	(T/C)
rs11792435	1		0.593524239	A	0.915099978	A	0.930599988	G	0.631200016	A	0.299800009	A			TOP	(A/G)
rs3949639																
rs3949639	0.260100007		0.291025766	B												
rs7043400																
rs7043400	0.328999996		0.699769622	A												
rs10977739	0.328999996		0.416413247	B												
rs4742596	0.389600009		0.437504855	A												
rs1105505	0.322100014		0.855102263	A												
rs3858066					0.409000009	C	0.041499998	C	0.01328	T	0.02657	T			Bot	(T/C)
rs10977743	0.045609999		0.940810269	B												
rs17829640					0.805800021	G	0.665400028	G	0.01259	A	0.028519999	A			Bot	(T/C)
rs17829640	0.36680001		0.200672353	B	0.805800021	G	0.665400028	G	0.01259	A	0.028519999	A			Bot	(T/C)
rs17767692	0.705900013		0.380475386	B												
rs7044915					0.567300022	C	0.108000003	C	0.057980001	T	0.136199996	T	0.018100001	C	Bot	(T/C)
rs1412877																
rs1412875					0.574199975	C	0.243300006	C	0.413599998	T	0.908900023	T			Bot	(T/C)
rs1412875					0.574199975	C	0.243300006	C	0.413599998	T	0.908900023	T			Bot	(T/C)
rs1412875	0.02671		0.603813291	B	0.574199975	C	0.243300006	C	0.413599998	T	0.908900023	T			Bot	(T/C)
rs1412873					0.994300008	A	0.910099983	G	0.414400011	A	0.996200025	G	0.289099991	A	Top	(A/G)
rs4142435	0.855000019		0.626173444	A												
rs10977747					0.583100021	C	0.915799975	T	0.895799995	C	0.592700005	C	0.917999983	T	Bot	(T/C)
rs2382010					0.581900001	T	0.809099972	T	0.263099998	T	0.230900005	T	0.119499996	C	Bot	(T/C)
rs16929395					0.110100001	C	0.03444	C	0.061859999	A	0.094130002	A			TOP	(A/C)
rs1360593					0.505900025	C	0.459199995	C	0.198699996	T	0.200499997	T	0.122100003	C	Bot	(T/C)
rs1360591					0.570299983	A	0.591199994	A	0.81160003	A	0.896399975	G			BOT	(T/C)
rs10977751	0.457500011		0.691740161	A												
rs10977755	0.381500006		0.588350602	A												
rs17768428	0.813199997		0.790618334	B												
rs1332212					0.568000019	C	0.765299976	C	0.379900008	C	0.50849998	C	0.487899989	T	Bot	(T/C)
rs10977759	0.381500006		0.827022316	B												
rs10977768	0.449299991		0.278690529	B												
rs1332810					0.611899972	T	0.830200017	T	0.194399998	C	0.222599998	C	0.781000018	T	Bot	(T/C)
rs1332809	0.449600011		0.7384831	A												
rs1332808	0.522199988		0.80403348	B	0.620700002	T	0.825399995	T	0.170100004	G	0.284999996	G	0.738200009	T	Bot	(T/G)
rs10816129					0.663399994	A	0.325899988	A	0.056000002	A	0.169699997	A	0.6153	G	Bot	(T/C)
rs7856640																
rs10977777	0.37380001		0.976825533	A												
rs1412872																
rs1412872	0.323599994		0.824449544	B												
rs1333107					0.844600022	T	0.372299999	T	0.095119998	T	0.127000004	T	0.568300009	C	Top	(A/G)
rs1333108					0.574999988	G	0.313899994	G	0.724300027	G	0.510599971	G	0.799399972	A	Top	(A/G)
rs7857812																
rs7857812	0.751900017		0.784809927	A												
rs7871096																
rs10977783	0.282000005		0.991062148	A												
rs10491614																
rs10491613					0.773699999	C	0.847599983	A	0.171700001	A	0.165700004	A	0.136800006	C	Bot	(T/G)
rs955474																
rs955474	0.244299993		0.176890381	B												
rs10977784																
rs10977785																
rs10977785	0.354499996		0.338108606	B												
rs10759076	0.432200015		0.968573156	B												
rs12350794	0.881299973		0.788985364	A												
rs12338165																
rs13286239					0.941999972	C	0.582799971	C	0.365700007	C	0.3116	C			Bot	(T/C)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hrn_dep_P	hrn_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn Strand	ACTG
rs12001482	9	9458051	0.008529	-	A	C	0.028803484	B	0.095095531	B													0.726499975	B			0.157499999	B					0.524806318	A			0.664499998		0.406900075	A											Bot	(T/C)
rs10816135	9	9459877	0.008529																																						0.817499995	G	0.72210002	G	0.008529	G	0.02073	G	0.462399989	A	Bot	(T/C)
rs16929560	9	9464970	0																																						0.581099987	A	0.411300004	A	0.043019999	A	0.150199994	A	0.730099976	A	Top	(A/C)
rs10115772	9	9465072	0	+	A	C	0.634420091	A	0.668563159	A													0.613499999	A			0	B		B			0.451544544			1			0.298541095	A												
rs10816138	9	9465383	0.01431216	+	C	G	0.729632341	A	0.146814863	B	0.583881898	A	0.910921512	A	0.647348718	A	0.892018662	A	0.765158863	B	0.250304312	B	0.438499987	B	0.060465292	A	0.323000014	A	0.929324101	B	0.681222628	A	0.066628536	0.955121663	A	0.231199995			0.378056941	A												
rs10977800	9	9465417	0.006387173	+	C	T	0.676089061	B	0.208113428	A	0.297659407	A	0.035032505	A	0.831265941	B	0.937255163	B	0.772603014	B	0.8755021	B	0.86589998	A	0.114687526	B	0.323000014	B	0.468409355	A	0.73479896	B	0.01431216	A	0.93385519	B	0.231199995			0.700187012	A												
rs10977801	9	9465644	0.002162269	+	C	T	0.006387173	A	0.930201015	A	0.077942163	A	0.234113514	B					0.028701504	A	0.818296344	B	0.227799997	A	0.386110249	A	0.342099994	A	0.508682248	B	0.009097522	A	0.016123188	0.028275699	A	0.765100002			0.247420568	B	0.929199994	T	0.826699972	C	0.465799987	T	0.939800024	T			Bot	(T/C)
rs10816139	9	9465774	0.002162269	-	C	G	0.503215452	B	0.388498361	B	0.476103165	A	0.295661384	B	0.84803206	A	0.875069553	A	0.315870572	B	0.688262866	A	0.467500001	B	0.011532388	A	0.647199988	A	0.478245917	B	0.540475705	A	0.002162269	0.753049021	A	0.273799986			0.512839896	B												
rs10816141	9	9465845	0.129702225	+	C	G	0.545783674	A	0.170920348	A	0.655153108	B	0.646113973	A	0.947294876	A	0.531290577	A	0.553226874	A	0.917398564	A	0.968800008	A	0.199151237	B	0.906000018	B	0.428437923	A	0.798889339	A	0.129702225	A	0.568830797	A	0.314900011			0.587156149	A												
rs10977804	9	9466126	0.019645854	-	C	G	0.571979086	B	0.437792055	A	0.426182382	B	0.166242641	A			0.992384711	B	0.78451161	A	0.30109295	B	0.467700005	B	0.203505755	B	0.275400013	B	0.155459408	A	0.364085724	B	0.153535296	A	0.324588511	B	0.381500006			0.600975644	A												
rs10759078	9	9466212	0.019645854	+	C	T	0.749395313	B	0.18511638	A	0.400175681	B	0.377382434	A	0.542620689	B	0.692939056	B	0.200157272	A	0.145351202	B	0.516300023	A	0.059833709	B	0.655399978	B	0.863404605	A	0.773397151	B	0.019645854	A	0.687422939	B	0.195600003			0.75982226	A												
rs10816142	9	9466425	0.076180004																																						0.846800029	C	0.966499984	C	0.076180004	C	0.216199994	C	0.503400028	T	Top	(A/G)
rs13287051	9	9466543	0.00182719	-	A	G	0.620193335	B	0.384156183	A													0.862699986	B			0.467400014	A					0.838061107	A			0.889999986		0.75637697	A												
rs11789423	9	9466652	0.00182719	-	A	G	0.017488858	A	0.959617527	B	0.63082418	A	0.582618055	B					0.543073687	A	0.460334999	A	0.081990004	A	0.837972422	A	0.342099994	A	0.671302831	B	0.451494332	B	0.00182719	0.314022573	A	0.765100002			0.105137697	B												
rs12115631	9	9471247	0.007596027	-	C	G	0.74749207	B	0.239725979	B													0.108099997	A			0.046	A					0.007596027	A			0.062419999	A	0.196038412	B												
rs10117271	9	9472268	0.02613	+	C	T	0.385358288	A	0.916409738	B					0.630984809	A	0.561600728	A	0.536782919	B	0.415009004	A	0.142199993	A	0.858826442	B	0.259000003	A	0.236888958	B	0.34772838	A	0.161993844			0.720099986			0.353136169	B												
rs2890870	9	9473035	0.02613	-	A	G					0.570530471	A	0.478679629	A	0.695383097	B																									0.57099998	C	0.287499994	C	0.3926	T	0.195999995	T	0.02613	C	Top	(A/G)
rs10977816	9	9473287	0.290513383	+	C	T					0.556454838	A	0.466358526	A																					0.37389979	B					0.348399997	T	0.555599988	T	0.884500027	C	0.763800025	C	0.813799977	C	BOT	(T/C)
rs10977817	9	9473311	0.290513383	-	C	T					0.549004593	B	0.290513383	A																					0.984411831	A																
rs2382017	9	9473573	0.240099996																																						0.676400006	C	0.293199986	C	0.824800015	T	0.95630002	T	0.836499989	C	Top	(A/G)
rs1332195	9	9473973	0.240099996																																						0.606599987	A	0.328299999	A	0.254599989	A	0.240099996	A			Top	(A/G)
rs867980	9	9474236	0.155499995	-	A	G					0.584704935	A	0.397358362	B	0.630282636	B																									0.691600025	T	0.361400008	T	0.535700023	C	0.83069998	C	0.841000021	T	Top	(A/G)
rs944641	9	9474811	0.006967694																																						0.894400001	G	0.706499994	G	0.155499995	G	0.173700005	G	0.653299987	A	Bot	(T/C)
rs7357721	9	9476282	0.006967694	-	C	T	0.805660806	B	0.264361825	B	0.568862065	B	0.006967694	A					0.271252706	B	0.643769675	A	0.456800014	B	0.367719694	B	0.416700006	B	0.688211112	B	0.693778588	B	0.026062102	A	0.91760999	A	0.827300012		0.591833316	A												
rs7468626	9	9476640	0.102763314	-	C	T	0.102763314	B	0.815088497	A													0.205599994	A			0.64319998	A					0.105937389	A			0.854399979		0.75921962	B												
rs10217697	9	9476961	0.186756022																																						0.958700001	G	0.425099999	G	0.70569998	A	0.602199972	A			Top	(A/G)
rs4237177	9	9477771	0.186756022	-	A	G	0.742579383	B	0.186756022	A													0.198799998	B			0.341600001	B					0.434792857	A			1		0.338176286	A	0.382999986	C	0.271100014	C	0.244200006	C	0.479600012	C	0.656099975	T	Top	(A/G)
rs7044905	9	9478322	0.007511001	+	A	C					0.583849491	B	0.456856925	A																					0.629251344	A																
rs7044905	9	9478322	0.007511001	+	A	C	0.136903252	B	0.338549063	A													0.405999988	B			0.84740001	B					0.007511001	A			0.318500012		0.468189542	B												
rs12339036	9	9478626	0.086499997																																						0.901499987	A	0.596099973	A	0.907599986	A	0.741400003	A	0.086499997	G	Bot	(T/C)
rs12349549	9	9479179	0.100779513	-	A	G	0.17584901	A	0.100779513	A					0.484691052	A			0.208595139	A	0.248325707	A	0.804700017	A	0.623103282	B	0.565400004	A	0.114784801	B	0.90078356	A	0.681325393			0.828700006		0.237472514	B												
rs10977821	9	9479220	0.062990002																																						0.641099989	T	0.990700007	T	0.957099974	T	0.514900029	C	0.731400013	C	Bot	(T/C)
rs11506751	9	9483391	0.062990002																																						0.701399982	C	0.468199998	C	0.462000012	T	0.998199999	C	0.062990002	T	Bot	(T/C)
rs4477398	9	9484729	0.061250001																																						0.697600007	G	0.732200027	G	0.653299987	G	0.699999988	G	0.180000007	G	Top	(A/G)
rs4307401	9	9485116	0.008230942																																						0.569000006	G	0.276800007	G							0.061250001	G	Bot	(T/C)
rs4551426	9	9485226	0.008230942	+	A	G	0.713247146	A	0.613739347	A													0.209399998	B			0.736400008	B					0.008230942	A			0.368600011		0.847392876	A	0.482300013	G	0.822099984	G	0.659300029	A	0.584999979	A	0.30399999	G	Bot	(T/C)
rs4534173	9	9486356	0.000305765	+	C	T	0.376322049	A	0.817962359	A													0.349900007	B			0.975600004	A					0.067433612	A			0.155200005		0.597614052	A	0.856700003	T	0.934599996	C	0.555100024	T	0.914300025	C			Bot	(T/C)
rs7029052	9	9487040	0.000305765	+	C	G	0.20212228	A	0.629951167	A	0.649684064	B	0.644709802	B	0.191564516	B	0.737673305	B	0.259848624	A	0.192017092	A	0.183200002	B	0.400580955	B	0.868200004	B	0.622328442	A	0.148560083	A	0.000305765	A	0.516470689	B	0.150700003		0.432176014	A												
rs2382019	9	9489126	0.072449997																																						0.570100009	G	0.533200026	G	0.381300002	G	0.462700009	G	0.072449997	G	Top	(A/G)
rs7855661	9	9489674	0.364600003																																						0.578000009	T	0.645699978	T	0.733900011	T	0.663600028	T			BOT	(T/C)
rs10977825	9	9492055	0.102155862																																						0.903900027	G	0.534500003	A	0.480199993	G	0.364600003	G			Top	(A/G)
rs10491612	9	9493114	0.003486552	+	A	T					0.174883571	B	0.102155862	A																																						
rs1332199	9	9493477	0.003486552	+	C	T	0.813788585	A	0.657613801	A	0.897745192	B	0.332003195	A	0.382170734	B	0.85030956	B	0.063265577	A	0.048340106	A	0.760399997	A	0.326551687	A	0.418599993	A	0.995521412	B	0.003486552	B	0.188944363	A	0.692547567	A	0.900699973		0.327655819	B												
rs4742605	9	9493941	0.001871177	-	A	C	0.611965452	A	0.685135772	B													0.780399978	B			0.533100009	A			B		0.039437998				0.172700003		0.282954267	A	0.949999988	T	0.948800027	G	0.308499992	T	0.692200005	T	0.964299977	T	Bot	(T/G)
rs12362674	9	9494243	0.000603256	-	A	G	0.5418336	B	0.001871177	A																	0.809899986	A					0.495894368	A			0.412299991		0.790510127	A												
rs12337005	9	9494430	0.000603256	+	C	T	0.000603256	B	0.01516707	A													0.992900014	A			0.765399993	A					0.028522493	A			0.81190002		0.640022102	B	0.241400003	C	0.077979997	C	0.504000008	T	0.373699993	T			Bot	(T/C)
rs11790706	9	9494580	0.047465641	+	G	T	0.821589107	B	0.747120136	A																	0.739499986	B			B		0.437626446				1		0.917160715	A												
rs1332202	9	9495249	0.047465641	-	A	T	0.270084522	A	0.423040944	B	0.42147313	A	0.249283106	B	0.233751143	A	0.252607216	A	0.810778632	B	0.047465641	B	0.921000004	A	0.406215452	A	0.900099993	A	0.830421674	B	0.386897552	A	0.788242791	0.408854908	B	0.653500021		0.297333423	A												
rs2890871	9	9495993	0.1637																																						0.258599997	C	0.1637	C	0.300700009	C	0.189600006	C			TOP	(A/G)
rs10977827	9	9496273	0.427899987																																						0.770500004	A	0.531799972	A	0.879599989	G	0.988200009	G			TOP	(A/G)
rs16929628	9	9496433	0.230100006																																						0.806299985	G	0.455199987	G	0.85860002	A	0.427899987	G	0.600700021	G	Bot	(T/C)
rs1332203	9	9496817	0.099543381	+	C	T					0.581051881	A	0.29080236	B	0.471118542	B																									0.600700021	T	0.230100006	T	0.761099994	T	0.612500012	T			TOP	(A/G)
rs10491611	9	9500856	0.099543381	-	C	T					0.099543381	A	0.878024163	B																																						
rs6582035	9	9506348	0.047422143																																						0.467599988	C	0.1109	C	0.239099994	C	0.347799987	C	0.363099992	C	Bot	(T/G)
rs7034573	9	9507017	0.047422143	+	A	C	0.112559779	B	0.216920705	A	0.851234012	B	0.66426376	A					0.991692194	B	0.119697072	A	0.699400008	A	0.132496295	B	0.816299975	B	0.472502014	B	0.636815711	A	0.047422143	A	0.384867932	A	1		0.413998361	A												
rs16929647	9	9507332	0.06245951	-	G	T	0.129743468	A	0.355553006	B	0.48659365	A	0.108168027	B	0.409625666	A	0.926904617	B	0.650330278	B	0.527207775	B	0.685299993	A	0.575656403	A	0.591000021	A	0.354573614	B	0.06245951	B	0.06386409		0.199875267	B	0.875100017		0.781006838	B												
rs672211	9	9507393	0.009425342	+	C	G					0.102426395	A	0.820563809	A																					0.636171605	B																
rs672211	9	9507393	0.009425342	+	C	G	0.105611648	A	0.848272215	A					0.399074099	B	0.695770837	A	0.286649035	B	0.009425342	A	0.599799991	A	0.610414135	B	0.942600012	A	0.867607031	A	0.665312298	A	0.176223437	A			0.695200026		0.251634649	A												
rs16929651	9	9512402	0.133200005	+	A	G	0.92328818	A	0.504798031	B													0.634199977	B			0.133200005	B					0.312979318	A			0.583100021		0.913107748	B												
rs6132728	9	9515707	0.21937314																																						0.726899982	A	0.345800012	A	0.903299987	C	0.716899991	C			TOP	(A/C)
rs632770	9	9515866	0.034740001	-	A	G	0.906647861	B	0.3898269	A													0.294699997	A			0.811200023	A					0.219373714	A			0.46419999		0.72343608	A												
rs633719	9	9516138	0.034740001	+	C	T	0.907228033	A	0.558867166	B	0.683246601	A	0.580571463	B					0.734588433	A	0.218762464	A	0.273900002	B	0.249548757	A	0.628400028	B	0.499775898	B	0.251816636	A	0.095429222	0.223548807	A	0.712100029		0.573103988	B	0.483599991	T	0.034740001	T	0.684800029	C	0.688600004	C	0.951300025	T	Bot	(T/C)
rs694959	9	9516811	0.184400007																																						0.425399989	A	0.216800004	A	0.184400007	C	0.2465	C	0.696200013	A	Bot	(T/G)
rs10739194	9	9518291	0.054956323	-	A	T					0.507601459	B	0.364991875	A																					0.239385532	A																
rs10739194	9	9518291	0.054956323	-	A	T	0.054956323	B	0.703019603	B													0.89200002	A			0.749499977	A		B			0.583607905				0.649900019		0.912816562	B												
rs7049205	9	9520755	0.073905385	-	A	G	0.378459005	A	0.556826666	B													0.884000003	A			0.361200005	B		B			0.334671712				0.908699989		0.93939087	A												
rs2038963	9	9523062	0.073905385	+	C	T	0.673567925	B	0.449581807	A	0.509519936	B	0.263533725	A	0.073905385	B	0.132687809	A	0.582498619	B	0.098941155	A	0.949999988	B	0.472003771	A	0.537599981	A	0.548329187	B	0.163665983	A	0.610418487	A	0.8922231	A	0.910899997		0.338382476	A	0.884000003	T	0.331099987	C	0.134200007	C	0.304199994	C	0.135900006	C	Bot	(T/C)
rs2182548	9	9523788	0.077584939																																						0.879199982	C	0.313499987	T	0.120700002	T	0.268400013	T	0.148000002	T	Top	(A/G)
rs10491610	9	9527211	0.077584939	-	A	C					0.077584939	B	0.445566174	A	0.942580624	B																																				
rs828825	9	9527965	0.138699994																																										0.531199992	A	0.987800002	G					Bot	(T/C)
rs828826	9	9527991	0.067680001																																						0.503199995	G	0.138699994	G	0.3468	T	0.2579	T	0.493299991	G	Top	(A/C)
rs625165	9	9528589	0.015831657																																						0.487699986	G	0.067680001	G	0.343400002	A	0.270300001	A	0.92809999	G	Bot	(T/C)
rs625517	9	9528820	0.015831657	-	G	T					0.32961749	A	0.015831657	B	0.073479313	B																																				
rs626804	9	9529114	0.066710003	+	C	T					0.238485265	B	0.083518212	A	0.131677673	A																									0.196099997	C	0.261400014	C	0.066710003	T	0.093149997	T	0.487899989	T	Top	(A/G)
rs627247	9	9529218	0.020779779	+	A	G					0.911132556	B	0.248593974	A	0.993789832	A																																				
rs628077	9	9529367	0.020779779	-	A	C	0.158357928	A	0.536806	B													0.701900005	B			0.688300014	B		B			0.020779779				0.378399998		0.877179492	A												
rs639168	9	9529574	0.009303451	+	C	T					0.720715375	A	0.8550246	A																					0.391579321	A																
rs639168	9	9529574	0.009303451	+	C	T	0.009303451	B	0.84830249	A					0.013782022	A	0.376166538	B	0.152279188	A	0.087630578	B	0.632700026	A	0.591295901	A	0.688300014	A	0.551329833	B	0.125334351	B	0.015257865	A			0.297100008		0.747603962	B												
rs16929713	9	9530141	0.061587651																																						0.962400019	T	0.168099999	C	0.418799996	C	0.589900017	C	0.63410002	C	Top	(A/G)
rs16929716	9	9530483	0.061587651	+	A	G	0.061587651	A	0.816308659	A													0.873700023	A			0.680499971	B					0.539352815	A			0.917100012		0.952573423	B												
rs1326769	9	9530555	0.133348014	+	C	G	0.133348014	B	0.718687302	A													0.310099989	A			0.890999973	A					0.139738545	A			0.269899994		0.55120192	B												
rs7850061	9	9534525	0.012288542	+	A	G					0.468559999	A	0.897253097	A																					0.972585464	B																
rs7850061	9	9534525	0.012288542	+	A	G	0.012288542	A	0.39309042	B									0.655122645	B	0.555109536	B	0.954599977	B	0.197132727	B	0.627300024	B	0.617738987	B	0.181373274	A	0.547929673			1			0.565096672	A												
rs666041	9	9537549	0.143399999																																						0.170699999	A	0.310600013	A	0.219500005	G	0.143399999	G			TOP	(A/G)
rs17179053	9	9543037	0.001403458																																						0.749599993	T	0.196199998	T	0.701600015	T	0.4736	T	0.68599999	C	Bot	(T/C)
SNP_A-1995817	9	9545424	0.001403458	+	C	T	0.001403458	B	0.725853821	A	0.197296061	B	0.668817153	A					0.390828086	B	0.489102883	A	0.271299988	B	0.079422339	B	0.495799989	B	0.894873307	A	0.165786973	B	0.00856222	A	0.662938595	A	1		0.340729492	A												
rs413333948	9	9545424	0.001403458	+	C	T	0.001403458	B	0.725853821	A	0.197296061	B	0.668817153	A					0.390828086	B	0.489102883	A	0.271299988	B	0.079422339	B	0.495799989	B	0.894873307	A	0.165786973	B	0.00856222	A	0.662938595	A	1		0.340729492	A												
rs828828	9	9546992	0.032536409																																						0.245900005	C	0.354900003	C	0.305400014	T	0.251899988	T	0.436100006	T	Top	(A/G)
rs828837	9	9549762	0	+	A	G	0.469008655	A	0.769477901	B	0.795541404	A	0.477871288	B	0.702479904	A	0.097109197	B	0.194532068	A	0.057504387	A	0.431600004	A	0.85470943	B	0.710300028	B	0.93309946	B	0.032536409	B	0.413694703	0.942833107	B	0.499599993		0.762751077	B												
rs7861302	9	9549853	0	-	C	T	0.026469622	B	0.094918521	A													0.379700005	B			0	B		B			0.269000065				1		0.697825817	B												
rs69781	9	9550151	0.00004344	+	C	T	0.550330917	A	0.624136432	B	0.984690891	B	0.44368408	B	0.992738639	B	0.286913004	B	0.391075115	A	0.115586999	B	0.241099998	A	0.920262245	A	0.974900007	A	0.711265487	B	0.14303618	B	0.027619364	0.587657668	A	0.333600014		0.375010954	B												
rs729002	9	9550338	0.00004344	-	C	G	0.164824445	B	0.504107495	A	0.186593612	A	0.478165908	A					0.206848646	A	0.531499437	A	0.874899983	B	0.657143346	B	0.1162	B	0.664542391	B	0.362456006	B	0.599620391	A	0.863738221	A	0.00004344		0.727962382	A												
rs6477401	9	9552067	0.05179548	+	A	C	0.850176563	B	0.05179548	A													0.70660001	B			0.496800005	B					0.481518396	A			1		0.090163855	A			0.317499995	A	0.158700004	A			TOP	(A/C)
rs10491609	9	9554203	0.035822044	-	A	G					0.073650432	B	0.145497261	A																																						
rs828840	9	9554527	0.012322818	+	C	T	0.035822044	B	0.071174366	A													0.076509997	A			0.542900026	A					0.210465832	A			0.428200007		0.779095231	A												
rs6477403	9	9554576	0.012322818	-	C	T	0.766250055	A	0.861689802	B													0.891200006	A			0.289200008	B					0.012322818	A			1		0.902905751	B												
rs16929760	9	9555335	0.000106714	+	A	G									0.142333087	A	0.704121689	B	0.399012725	B	0.218482526	A			0.073655137	A			0.606031316	A	0.881788327	B																				
rs7853311	9	9556814	0.000106714	-	C	G					0.455116394	B	0.000106714	A																																						
rs16929763	9	9558591	0.06189245	+	C	T					0.191252422	A	0.06189245	B																													0.715300024	T	0.89349997	T			Top	(A/G)
rs16929763	9	9558591	0.078268935	+	C	T	0.720751984	B	0.078268935	A													0.802299976	B			0.943799973	B		B			0.323453151				0.803799987		0.482531919	B			0.715300024	T	0.89349997	T			Top	(A/G)
rs660717	9	9559081	0.412346935	+	A	C					0.523507794	A	0.878138333	B	0.880853691	A																																				
rs660717	9	9559081	0.390199989	+	A	C					0.412346935	A	0.715270031	A																					0.679768125	A																
rs609641	9	9560946	0.090041223	+	C	T	0.783713386	A	0.658140875	B													0.692399979	A			0.859200001	A		B			0.429921599				0.390199989		0.887049046	B												
rs16929778	9	9562365	0.02661	+	A	C	0.387562618	A	0.090041223	A													0.268900008	B			0.289200008	B					0.168175548	A			1		0.107560637	A												
rs638230	9	9562790	0.02661	+	G	T	0.913893276	A	0.43420859	A													0.733900011	A			0.819700003	A					0.565525015	A			0.617900014		0.175201072	B	0.235100001	G	0.02661	G	0.905399978	G	0.586099982	T	0.606400013	G	Bot	(T/G)
rs652649	9

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	limnStrand	ACTG
rs617286	9	9568150	0.044780001																																						0.309100002	A	0.044780001	A	0.477200002	G	0.176499993	G			Bot	(T/C)
rs602962	9	9569104	0.040029719	+	C	T	0.744726118	B	0.94684523	B													0.86589998	A			0.859200001	A					0.512818411	A					0.15485858	B												
rs602962	9	9569104	0.038712081	+	C	T	0.827577847	A	0.632732535	B	0.824940724	A	0.625172891	B	0.505002327	B	0.284208891	B	0.396343675	A	0.040029719	B	0.86589998	A	0.570638965	B	0.859200001	A	0.42220445	B	0.45175885	B	0.346168669		0.268960536	A	0.771099985		0.287325689	B												
rs588996	9	9569884	0.038712081	+	A	T	0.416979987	A	0.643335996	B	0.248541759	A	0.835965172	A	0.887936339	B	0.08733475	B	0.593878738	A	0.127040182	A	0.822099984	A	0.535049111	A	0.859499991	B	0.917937783	B	0.038712081	B	0.074429565		0.449208629	A	0.921500027		0.588232118	B												
rs568026	9	9571692	0.06679	+	C	T	0.876448994	B	0.310633271	B	0.206066291	B	0.917192335	B	0.906419602	B	0.409884406	B	0.157513088	A	0.96399501	B	0.475300014	A	0.594614348	B	0.917400003	A	0.926803656	B	0.176341086	B	0.138211085		0.445280071	A	1		0.815756744	B												
rs679640	9	9571738	0.042156064																																						0.172000006	G	0.06679	G	0.306300014	A	0.470600009	A			Top	(A/G)
rs681437	9	9572128	0.031928559	-	C	G	0.641479523	A	0.378919826	A					0.884395965	A	0.692868959	A	0.193434411	B	0.276493682	B	0.395700008	B	0.376430993	B	0.708199978	B	0.54239186	A	0.301149328	A	0.042156064	A			1		0.577055883	A												
rs603229	9	9574082	0.031928559	-	A	G	0.031928559	A	0.665261012	B													0.239999995	B			0.953499973	A			B		0.968671097				0.842800021		0.582603837	A												
rs10118823	9	9574471	0	-	A	G					0.15344972	B	0.499906111	A																																						
rs10118823	9	9574471	0	-	A	G	0.313516909	A	0.420826501	B													0.006293	A			0	B			B		0.444365319				1		0.68691284	B												
rs16929819	9	9574526	0.065721802	-	A	G	0.690261395	B	0.706686796	A													0.5722	B			0.289200008	A			B		0.80871049				1		0.972500077	A												
rs16929832	9	9577003	0.060459696	+	C	G	0.465935107	B	0.549024103	A													0.270999998	B			0.289200008	A			B		0.065721802				1		0.755326566	A												
rs16929836	9	9577545	0.060459696	+	C	G					0.079591066	A	0.162733114	B					0.122440081	A	0.252402042	B			0.060459696	A			0.60452836	B	0.541399763	A			0.061659084	A														
rs676855	9	9577666	0.02149618	-	A	G	0.713581032	B	0.859060198	A	0.844706293	A	0.955305835	B	0.771117311	A	0.40130467	B	0.80404814	A	0.293934234	A	0.74180001	A	0.440908173	B	0.373600006	A	0.364289386	B	0.478291636	B	0.529411112		0.576066322	A	0.5625		0.630195265	B												
rs677783	9	9577860	0.02149618	-	C	T	0.384063886	B	0.02149618	A	0.198858222	A	0.397288421	A					0.570920162	A	0.497293246	B	0.761600018	A	0.121949357	A	0.629100025	A	0.623952852	A	0.167864618	B	0.198291002	A	0.991906431	B	0.611999989		0.02337759	B												
rs16929848	9	9578157	0.066330001																																								0.881099999	A	0.946399987	A			Bot	(T/C)
rs610789	9	9578336	0.066330001																																						0.196700007	C	0.066330001	C	0.598100007	C	0.656400025	C	0.592899978	C	Top	(A/G)
rs598356	9	9578824	0.078210044																																						0.2359	C	0.078210004	C	0.443599999	C	0.536000013	C	0.546199977	C	Top	(A/C)
rs598768	9	9579682	0.132129928	+	A	G	0.866733487	A	0.447796418	A					0.880747287	A	0.132129928	A	0.993803436	A	0.162029347	B	0.58950001	B	0.611852921	A	0.268099994	B	0.277419964	B	0.842602807	A	0.205084196				0.560400009		0.411718873	A												
rs583921	9	9579696	0.081019998	+	C	G	0.473586109	B	0.523833644	A													0.707199991	A			0.950699985	A			B		0.534557607				0.820500016		0.325643573	B												
rs615224	9	9581059	0.081019998																																						0.191	G	0.081019998	G	0.192900002	T	0.191300005	T	0.370900005	G	Bot	(T/G)
rs657849	9	9583722	0.079779465	+	A	C	0.511435327	B	0.261378611	A	0.677060137	A	0.515503848	A	0.286974272	B	0.812549143	A	0.127434992	B	0.216507555	B	0.4921	B	0.211007926	A	0.328799993	B	0.086376713	B	0.763676095	B	0.154038345	A	0.900943651	B	0.441500008		0.742461711	A												
rs1412398	9	9589213	0.079779465	+	C	T					0.079779465	B	0.233682694	A	0.804076623	B																									0.56220001	G	0.254099995	G	0.166299999	A	0.504499972	A	0.64139998	G	Bot	(T/C)
rs651116	9	9589450	0.224763834	+	G	T					0.79965695	B	0.224763834	B	0.803940225	A																																				
rs655125	9	9589647	0.080108814	+	C	T					0.862882239	A	0.554742885	B	0.836698812	A																																				
rs16929886	9	9589760	0.080108814	-	C	T	0.557769985	A	0.080108814	A													0.900900006	A			0.873399973	A			B		0.828241505				0.422100008		0.491859962	B												
rs656074	9	9589879	0.07587																																						0.248099998	C	0.194499999	C	0.252099991	T	0.342500001	T	0.412099987	C	Top	(A/G)
rs664869	9	9590239	0.07587																																						0.346700013	T	0.07587	T	0.258100003	G	0.096979998	G			Top	(A/C)
rs664921	9	9590271	0.290300012	+	A	G					0.82501042	A	0.842068287	A	0.51850186	A																									0.636900008	C	0.316199988	C	0.290300012	A	0.334500015	A	0.646399975	C	Bot	(T/G)
rs9407436	9	9590720	0.018172776																																																	
rs10977861	9	9591987	0.009399878	+	C	T	0.364535442	A	0.018172776	A													0.73210001	A			0.781700015	A					0.068861006	A			0.190300003		0.791318349	A												
rs7046780	9	9592389	0.009399878	+	G	T	0.560228707	B	0.240779098	A	0.775946032	B	0.275595571	A	0.493248491	A	0.610471809	A	0.820256774	B	0.498859151	B	0.099770002	B	0.128657321	A	0.29339999	B	0.340008335	B	0.009399878	A	0.026393976	A	0.413300923	B	0.034639999		0.932794759	B												
rs12236648	9	9592426	0.009459676	-	C	T	0.765077392	A	0.867874296	B	0.329618959	A	0.815283008	A	0.741180198	A	0.997264231	A	0.470705921	A	0.009459676	A	0.207800001	A	0.138827821	B	0.196600005	A	0.526151369	B	0.132778621	B	0.473711963		0.85155665	A	0.355500013		0.891247871	A												
rs1326772	9	9592686	0.106089027																																						0.891200006	A	0.334600002	C	0.135499999	A	0.225099996	A			Bot	(T/G)
rs1326774	9	9592863	0.017519941	-	A	C	0.896566521	A	0.835498083	A													0.187800005	A			0.496800005	B					0.106089027	A			0.709900022		0.354294778	A												
rs10977865	9	9593122	0.017519941	+	A	T	0.678403161	A	0.712469479	B	0.487112544	A	0.888906004	B	0.895582652	A	0.554819311	B	0.968131418	A	0.206747622	A	0.080990002	A	0.449662783	B	0.29370001	A	0.182819911	B	0.017519941	B	0.047944655		0.215430613	A	0.087860033	A	0.355642261	B												
rs7029761	9	9595832	0.002328056																																						0.725300014	G	0.630599976	G	0.959100008	G	0.34799999	T	0.986599982	G	Top	(A/C)
rs10977873	9	9598981	0.002328056	+	C	G	0.820617467	A	0.341132651	B	0.612203367	A	0.346023946	B	0.17556299	A	0.92723041	B	0.121638022	A	0.285437856	A	0.156900004	A	0.173506027	B	0.609600008	A	0.066504175	B	0.939503658	B	0.002328056		0.427257222	A	0.921700001		0.829321308	A												
rs10977874	9	9599283	0.031994157								0.835533774	B	0.655205503	B																											0.255600005	T	0.068970002	T	0.865199983	C	0.507799983	C	0.97299999	T	Top	(A/G)
rs10491608	9	9606646	0.031994157	+	C	T					0.228688085	A	0.610468049	B	0.0319941 57	A																									0.540600002	A	0.634500027	A	0.404500008	G	0.673500001	G	0.971199989	G	Bot	(T/C)
rs17786597	9	9610141	0.270399988																																						0.396699995	T	0.396299988	T	0.270399988	G	0.3926	G			TOP	(A/C)
rs16929919	9	9611487	0.001640799	+	A	G					0.336616843	A	0.326256093	B																					0.867032327	A																
rs16929919	9	9611487	0.001640799	+	A	G	0.876136429	B	0.63918345	B													0.423599988	A			0.510500014	A			B		0.001640799				0.381399989		0.315117733	A												
rs16929927	9	9612126	0.004132518	+	A	G					0.032548649	A	0.488575325	A																																						
rs1831033	9	9614597	0.004132518	+	G	T	0.909513912	A	0.127349802	A					0.004132518	B	0.823082517	A	0.092982878	B	0.276168769	A	0.422600001	B	0.022079667	A	0.644699991	B	0.613071402	B	0.010694698	A	0.066455514	A			0.462099999		0.529832362	A	0.965699971	G	0.636600018	G	0.8151000 14	T	0.878199995	G			Top	(A/C)
rs10816148	9	9615640	0.029449875	-	A	T					0.687837633	A	0.936755627	A																					0.544256606	A																
rs12380006	9	9616236	0.029449875	+	A	T					0.650316182	B	0.391520325	B																					0.029449875	A																
rs12380006	9	9616236	0.000775524	+	A	T	0.647564936	A	0.393216261	A													0.805100024	B			0.753099978	A			B		0.603457185				0.057440002	B	0.19296667	A												
rs16929934	9	9617740	0.000775524	-	C	T	0.676605507	A	0.000775524	A													0.988499999	B			0.133200005	B			B		0.876536752				1		0.193996449	B												
rs10977891	9	9618367	0.067659996	-	C	G	0.832461561	B	0.313352195	B													0.435200006	A			0.76819998	A					0.425553732	A			0.067659996	A	0.170960189	B												
rs1326761	9	9619920	0.118199997																																						0.417499989	A	0.40959999	A	0.185399994	A	0.118199997	A	0.496699989	G	TOP	(A/G)
rs10977894	9	9620643	0.129700005																																						0.395200014	G	0.386200011	G	0.372099996	G	0.129700005	G	0.496699989	A	Top	(A/G)
rs10977896	9	9620855	0.00303492																																						0.519500017	G	0.476099998	G	0.298500001	T	0.898899972	T	0.985000014	T	Bot	(T/G)
rs943298	9	9621694	0.00303492	-	G	T	0.467906103	A	0.201218657	B	0.632480945	B	0.932500159	A	0.096092812	A	0.156078033	B	0.992223285	B	0.130852846	A	0.466699988	A	0.71654478	A	0.552399993	A	0.467074977	B	0.738194525	A	0.00303492		0.816651321	A	0.92110002		0.344009454	A												
rs10977897	9	9622921	0.016626822	+	A	G	0.581068784	B	0.161924629	A													0.05102	A			0.873399973	B			B		0.336833251				0.241600007		0.948680393	B	0.269499987	A	0.28459999	A	0.151299998	A	0.09674	A	0.400400013	A	Bot	(T/C)
rs12378998	9	9623427	0.016626822	+	C	G	0.924984651	B	0.251330466	B	0.493669917	B	0.580054177	B					0.344105473	A	0.332635238	B	0.064429998	A	0.57485973	B	0.987699986	A	0.274369535	A	0.016626822	B	0.967425452	A	0.653891966	B	0.902199984		0.082981683	B												
rs10816150	9	9624746	0.003112021																																						0.181799993	G	0.260600001	G	0.176499993	G	0.075460002	G	0.37439999	G	Top	(A/G)
rs10491607	9	9626037	0.003112021	+	A	G					0.005120262	A	0.003112021	B																																						
rs10977904	9	9627042	0.184383967	-	A	G					0.804563899	B	0.184383967	B																					0.445019889	B																
rs10977905	9	9627189	0.000132708	+	C	T					0.835533774	B	0.65520503	B																					0.70493417	A																
rs10977905	9	9627189	0.000132708	+	C	T	0.241314219	B	0.108990798	A					0.199459173	B	0.932828119	A	0.976020782	A	0.107077148	A	0.762499988	B	0.769756879	A	0.407599986	B	0.901999017	B	0.756711579	B	0.000132708	A			1		0.194808409	B												
rs10816152	9	9628505	0.074759269	-	G	T					0.916534678	A	0.218465799	B																					0.298187022	B																
rs10816152	9	9628505	0.040478129	-	G	T	0.775577766	B	0.397117964	B									0.969077165	A	0.61684559	B	0.195999995	B	0.617351362	A	0.4718	A	0.986172152	B	0.074759269	A	0.760198852				0.904999971		0.610948849	A												
rs16929967	9	9629926	0.003970534	+	C	T	0.08008266	B	0.780632391	B	0.953949146	B	0.163789805	A					0.040478129	B	0.143341013	B	0.69630003	B	0.211864767	B	0.115500003	B	0.34237166	B	0.908956233	A	0.416334711	A	0.715961988	B	1		0.717457872	A												
rs7864331	9	9630335	0	+	G	T	0.370099064	B	0.955355881	A	0.560918918	B	0.686158129	A	0.954400254	B	0.518018548	B	0.587412154	B	0.863172827	A	0.0343	B	0.76686613	A	0.323700011	B	0.445228205	A	0.244838551	A	0.003970534	A	0.886217764	B	0.718200028		0.998443249	A	0.585900009	T	0.687399983	T	0.179000005	T	0.03098	T	0.747600019	T	Top	(A/C)
rs7874790	9	9630535	0	-	A	C	0.62623467	B	0.759362666	A													0.730099976	B			0	A					0.008273656	A			1		0.593137869	A											0.710799992	G	0.261799991	G			Bot	(T/G)
rs16929972	9	9631169	0.023056189																																																0.360300005	G	0.72210002	G			Bot	(T/G)
rs16929978	9	9631475	0.023056189	+	A	G					0.931567269	B	0.023056189	B					0.815757082	A	0.024539994	B			0.267593496	A			0.077551374	B	0.598153889	A			0.988085653	A																
rs1326765	9	9633370	0.095299996	+	C	T					0.57091356	A	0.240631262	A																																						
rs10759083	9	9637916	0.000196073																																						0.381000012	C	0.5352	C	0.4454	C	0.095299996	C	0.726599991	C	Top	(A/G)
rs12351554	9	9639179	0.000196073	+	C	G	0.229807644	A	0.761398513	B													0.545799971	B			0.582400024	B			B		0.000196073				1		0.623333294	B												
rs17183242	9	9639668	0.004788858	-	A	G					0.587035074	A	0.57751378	B																					0.145145428	B							0.283199996	T	0.104999997	T	0.109800004	C	0.528999984	C			TOP	(A/G)
rs17183242	9	9639668	0.004788858	-	A	G	0.952533849	B	0.770611374	A					0.041366667	B	0.354904022	A	0.667021828	B	0.004914138	A	0.223100007	B	0.200529755	A	0.920899987	A	0.195033344	B	0.624896439	A	0.004788858	A			0.846199989		0.948201342	A	0.283199996	T	0.104999997	T	0.109800004	C	0.528999984	C			TOP	(A/G)
rs10759084	9	9652428	0.007934024	-	A	T	0.465870036	B	0.748824199	B													0.836799979	A			0.263399988	A					0.007934024	A			0.527100027		0.754409981	A												
rs10759085	9	9652772	0.095930003	-	A	G	0.774891821	A	0.727945583	B					0.569747042	B	0.506622888	B	0.794023865	B	0.139480029	B	0.292199999	A	0.556792485	A	0.392500013	A	0.177072657	B	0.869390291	B	0.349119731	A			0.692900002		0.946267616	A												
rs10816160	9	9652940	0.04103191	-	G	T	0.6983938	B	0.856295535	A													0.310900003	B			0.392500013	B			B		0.479157617				0.584800005		0.907103044	A	0.109999999	A	0.095930003	A	0.954200029	C	0.59649998	A	0.507499993	A	Bot	(T/G)
rs16930036	9	9654440	0.04103191	-	C	T	0.948280296	B	0.141224535	A	0.424562246	B	0.806697395	B					0.14135541	A	0.100837257	A	0.483999997	A	0.190229374	B	0.289200008	B	0.04103191	B	0.185513874	B	0.797582747		0.26714392	B	1		0.141885122	B												
rs12380152	9	9656444	0.113300003																																						0.343199998	C	0.45629999	C	0.969299972	C	0.297399998	C	0.541999996	T	Top	(A/G)
rs7854287	9	9657071	0.113300003																																						0.398999989	G	0.653299987	G	0.412499994	G	0.113300003	G			TOP	(A/G)
rs2821477	9	9663320	0.117399998																																						0.666400015	T	0.316100001	T	0.462700009	C	0.117399998	C	0.931500018	C	Top	(A/G)
rs9644897	9	9671202	0.090051296	+	A	C	0.147619045	B	0.440518006	B													0.885599971	B			0.266499996	A					0.164022324	A			0.173299998		0.828537657	A												
rs9644898	9	9672829	0	-	A	T	0.090051296	A	0.906311937	A													0.438899994	B			0.476799995	B			B		0.363726158				0.317400008		0.969475668	B												
rs6477404	9	9673238	0	+	A	C	0.955031836	A	0.953165321	B									0.38755196	B	0.109255223	A	0.902100027	A	0.068988431	B	0	A	0.089675633	A	0.157226129	B	0.023094942	A			1		0.986344983	A												
rs7039700	9	9673443	0.087729998	+	C	T					0.197229849	A	0.559907284	A																					0.947247988	A							0.097120002	T	0.096249998	T	0.249500006	T	0.090389997	T	0.492399991	T	Bot	(T/C)
rs1934269	9	9674129	0.01379	+	A	G	0.732920388	A	0.751583062	B	0.34832918	B	0.880436094	A	0.398253697	B	0.540184809	A	0.241145067	A	0.589933539	B	0.205699995	B	0.83268631	A	0.880999982	B	0.615778022	B	0.460377388	A	0.657021839		0.821036058	A	0.772300005		0.740741514	A	0.671500027	C	0.94690001	C	0.195999995	C	0.087729998	C	0.969200015	T	Bot	(T/C)
rs7856030	9	9675304	0.01379	-	A	C	0.574519766	A	0.212521667	A	0.550699713	A	0.265315662	A					0.315555616	B	0.173634869	B	0.532100022	B	0.705271325	B	0.772599995	A	0.300462517	B	0.626700596	A	0.20888863		0.45865068	B	0.01379		0.581216796	B												
rs4742610	9	9677487	0.10447994																																						0.202999994	C	0.189300001	C	0.201700002	C	0.128299996	C	0.816600025	T	Top	(A/G)
rs4742611	9	9677679	0.10447994	-	A	G	0.602893341	A	0.611061047	A													0.166999996	A			0.223800004	B			B		0.10447994				0.203899995		0.337866689	B												
rs2803366	9	9677742	0.062150002																																						0.808000028	C	0.561500013	C					0.637600005	C	Top	(A/G)
rs1934264	9	9683867	0.027051373																																						0.073590003	T	0.062150002	T	0.229000002	T	0.224199995	T	0.509199977	T	Top	(A/G)
rs10759088	9	9688530	0.027051373	-	C	T	0.939653312	A	0.206488877	B	0.95433865	B	0.870252563	B	0.765600921	B	0.327144963	B	0.391139308	B	0.100489267	A	0.738900006	A	0.027051373	A	0.2007	A	0.104974149	B	0.42803354	A	0.086553983	A	0.694122725	A	0.031629998		0.854267721	B												
rs10759089	9	9688642	0.049479999	-	A	T	0.987119477	B	0.395933594	A	0.922445955	A	0.568035161	A	0.980177514	A	0.553294561	A	0.710244197	A	0.323122844	B	0.759199977	B	0.217961112	B	0.245199993	B	0.129171187	B	0.335603071	B	0.120555041		0.871838445	A	0.049479999		0.883896313	B												
rs12551242	9	9690448	0.204699993																																						0.76849997	C	0.587199986	C	0.797800005	T	0.419499993	T	0.999800026	T	Top	(A/G)
rs9657638	9	9691354	0.204699993																																						0.466800004	T	0.430799991	T	0.697300017	T	0.204699993	T	0.797599971	T	Top	(A/G)
rs10511526	9	9691768	0.406500012																																						0.658200026	T	0.581799984	T	0.406500012	T	0.952700009	C	0.572300017	C	Bot	(T/C)
rs2211134	9	9694501	0.070728776																																						0.442200005	G	0.728200018	G	0.995800018	G	0.537400007	G	0.424600005	G	Bot	(T/C)
rs2382039	9	9697016	0.070728776	+	C	T	0.198381106	B	0.070728776	A													0.536199987	A			0.737100005	B			B		0.934612846				0.116099998		0.798755171	A												
rs10739199	9	9697144	0.087669998																																						0.087669998	G	0.233999997	G	0.890900016	G	0.399399996	G	0.868700028	A	Top	(A/G)
rs13289361	9	9697824	0.037670001																																										0.397799999	C	0.950200021	T			Bot	(T/C)
rs4628308	9	9698107	0.037670001																																						0.537500024	A	0.113499999	A	0.565800011	C	0.037670001	C	0.220599994	C	Top	(A/C)
rs12686088	9	9701875	0.001639	+	C	T	0.291380728	A	0.040413185	B	0.334148679	A	0.500184816	B	0.496782681	B	0.643001406	A	0.382823812	A	0.402238675	A			0.257760179	B	0.343699992	A	0.955263837	B	0.706131869	B	0.137019388	A	0.108081582	B	0.515100002		0.235323569	A												
rs4391483	9	9701904	0.000221007	+	A	G	0.507446855	B	0.769733609	B	0.727679771	A	0.318641374	B	0.372591262	B	0.832916748	B	0.84706598	A	0.2728226 14	B	0.001639	B	0.056629793	A	0.780099988	A	0.55818176	B	0.825397242	B	0.005280046	A	0.182110139	B	0.647099972		0.438618735	A	0.0579	A	0.108800001	A	0.759400001	A	0.839299977	A	0.467700005	G	Bot	(T/C)
rs4132322	9	9702495	0.000221007	+	A	G	0.00380942	A	0.000221007	B					0.094867317	B	0.373674288	A	0.770060697	A	0.808390364	B			0.486132025	A	0.343699992	A	0.017383267	B	0.416702688	B	0.765288001				0.515100002		0.343836559	B												
rs17609354	9	9702549	0.008895	+	C	G	0.045731864	A	0.118845239	B	0.68347669	B	0.149972531	A			0.948270684	A	0.026666662	A	0.849492345	B	0.761600018	A

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgjda_P	jgjda_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_Treut_pval	Treut_phase	Ilmn	Strand	ACTG
rs10511528	9	9708066	0.038729288	+	C	T					0.068428559	B	0.243321943	B	0.42989645	A																									0.320899993	C	0.195700005	C	0.517700017	C	0.280499995	C	0.492300004	C	Bot	(T/C)
rs10816166	9	9709887	0.038729288	+	C	T	0.209455684	A	0.753398912	B													0.385399997	B			0.873300016	A		B			0.038729288			1			0.93449772	A												
rs6477405	9	9710279	0.099239998																																						0.117600001	A	0.099239998	A	0.952000022	A	0.8398	C	0.436100006	A	Top	(A/C)
rs6477411	9	9710505	0.1141358826	-	C	G									0.56015613	A	0.114135826	A	0.662718419	B	0.378475988	A			0.765044416	A			0.692414721	B	0.223756058	A																				
rs12336958	9	9710888	0.004193196	+	C	G					0.3139646	A	0.707770376	B																					0.269066751	A																
rs10429529	9	9714816	0.002811062	+	C	T	0.756013875	A	0.940066507	A	0.724454735	A	0.803268169	B	0.559651929	B	0.911635374	B	0.370223232	B	0.35528541	B	0.036320001	B	0.106041038	A	0.748399973	A	0.071478755	B	0.24840043	A	0.004193196	A	0.800457674	B	0.282599986		0.084431095	A	0.619700015	C	0.507799983	C	0.469700009	C	0.4287	C	0.361299992	T	Top	(A/G)
rs4273904	9	9714976	0.002811062	-	C	T	0.693662212	A	0.084804082	B					0.331660894	A	0.66505092	A	0.836967571	B	0.952829076	A	0.326400012	B	0.879975835	A	0.900399983	A	0.033927555	B	0.433520972	B	0.002811062			0.370000005		0.456408933	A	0.512499988	G	0.368200004	G	0.925400019	G	0.876900017	A	0.600600004	G	Bot	(T/C)
rs7047812	9	9716090	0.004662514	+	A	C	0.153721541	A	0.077392934	B	0.378805517	A	0.982230979	A	0.585985688	B	0.679401614	A	0.385165425	B	0.004662514	B	0.03785	B	0.245079452	A	0.223100007	A	0.406322417	B	0.134524618	A	0.176362718		0.249357544	A	0.410100013		0.125975318	A												
rs4490896	9	9716233	0.009512059	+	C	T	0.647024933	B	0.151049204	A	0.161906046	B	0.439921073	A	0.054905654	B	0.58204575	A	0.789568358	A	0.27513119	A			0.167294616	B	0.343699992	A	0.87944287	B	0.314088302	B	0.168114063	A	0.597706839	B	0.613699973		0.667803871	B												
rs7048068	9	9716251	0.009512059	+	A	C	0.712798819	A	0.26969125	B	0.87479719	B	0.78503913	A					0.991194689	B	0.177275912	A	0.461100012	A	0.107563132	B	0.166400001	A	0.499513517	B	0.310367038	B	0.009512059		0.319455752	A	1		0.619924236	A												
rs4382526	9	9716395	0.003785986	+	A	G					0.709232892	A	0.951322228	A																					0.330735631	A																
rs6477414	9	9716850	0.003785986	+	A	T	0.983745313	A	0.18971547	B					0.155147412	A	0.858079247	B	0.314076193	A	0.980659607	A	0.799000025	B	0.054659654	B	0.989300013	A	0.18646282	B	0.131365684	B	0.003785986			0.369500011		0.900859451	B												
rs7863452	9	9717555	0.085959066	-	C	T					0.610907105	A	0.732818618	A																					0.457607931	A																
rs7863452	9	9717555	0.00061563	-	C	T	0.480622449	A	0.33303561	B									0.085959066	B	0.116082059	B	0.467400014	A	0.324456552	B	0.146400005	A	0.257590648	B	0.30819888	B	0.128512945			1			0.566244909	B												
rs10816168	9	9718354	0.00061563	-	C	G	0.824958348	B	0.694036866	B					0.515163487	B	0.645922053	B	0.764890932	B	0.596075387	B	0.006057	B	0.125184379	A	0.548099995	A	0.013581159	B	0.200397841	A	0.00061563	A		0.279000014		0.093605381	A												
rs4237178	9	9718895	0.075261597	-	A	G	0.34178796	B	0.261468804	A													0.888400018	B			0.343699992	A					0.075261597	A		0.291599989		0.897485653	B												
rs10816169	9	9719134	0.05142																																						0.628600001	T	0.497299999	T	0.535700023	T	0.481099993	T	0.372599989	C	Bot	(T/C)
rs1934268	9	9720366	0.05142	-	A	G					0.940875648	A	0.111919339	B	0.84110778	A																									0.173099995	C	0.080250002	C	0.171100006	C	0.05142	C	0.896499991	C	Top	(A/G)
rs2225979	9	9720381	0.226500005																																						0.454100013	G	0.322899997	G	0.470899999	G	0.584699988	G	0.432099998	G	Top	(A/G)
rs6477416	9	9720473	0.226500005																																										0.226500005	G	0.307700008	G					Bot	(T/C)
rs2025392	9	9723309	0.075039998																																						0.577099979	C	0.466500014	C	0.405200005	C	0.481900007	C	0.451900005	C	Bot	(T/C)
rs2761762	9	9723974	0.075039998																																						0.352699995	G	0.133100003	G	0.123599999	G	0.075039998	G	0.802699983	G	Top	(A/G)
rs1323800	9	9726054	0.006281437																																						0.869700015	T	0.458200008	T	0.92750001	T	0.311800003	C			Bot	(T/C)
rs2025394	9	9726587	0.006281437	-	C	T	0.884010387	B	0.484935708	B					0.357343805	A	0.778837588	A	0.22575866	A	0.474254774	A	0.060910001	B	0.369497398	B	0.882300019	A	0.263450266	B	0.070587399	B	0.006281437			0.51910001		0.757486731	B												
rs1408125	9	9727201	3.83259E-06																																						0.077950001	G	0.104599997	G	0.732599974	A	0.601499975	A			Bot	(T/C)
rs1768885	9	9730949	3.83259E-06	-	A	C	0.555406081	A	0.780563272	B	0.873658902	A	0.59335424	B	0.910458824	B	0.22943715	A	0.659324427	A	0.620681583	B	0.388300002	B	0.180750416	B	0.916400015	A	0.093215037	B	0.019669007	B	3.83E-06		0.830130293	A	0.855199993		0.475999054	B	0.036109999	A	0.068910003	A	0.82980001	C	0.782199979	C			BOT	(T/G)
rs1746810	9	9731324	0.000760156	+	A	G	0.347341144	B	0.890273092	A													0.262899995	A			0.974900007	B					0.000760156	A		0.710900009		0.996655556	B												
rs1629307	9	9732685	0	-	A	G	0.341050116	B	0.382329974	A	0.376153517	B	0.81939463	A	0.523188142	A	0.4843105	B	0.284689756	B	0.961354528	A	0.2861	A	0.299025087	A	0.882300019	B	0.660184908	B	0.023220299	A	0.009835804	A	0.868392899	B	0.646099985		0.286105932	A												
rs16930186	9	9735020	0	+	A	G	0.08882908	B	0.940833902	B													0.874899983	B			0		A				0.18631903	A		1			0.726796118	A												
rs2761703	9	9736553	0.111520973								0.111520973	A	0.819353133	A	0.681006412	B																																				
rs2821469	9	9737032	0.004548852	-	C	G					0.369047062	A	0.956657282	B																					0.775108663	B																
rs2821469	9	9737032	0.004548852	-	C	G	0.300661876	A	0.840584118	B													0.0116	B			0.622900009	A		B			0.004548852			0.474000007		0.304863575	A												
rs1934267	9	9737056	0.159199998	+	C	T					0.71752769	A	0.814186943	A																					0.863273936	B																
rs1359176	9	9740139	0.159199998																																						0.323599994	C	0.159199998	C	0.592800021	T	0.317299992	T	0.189300001	C	Top	(A/G)
rs1768890	9	9740994	0.037799999	+	C	T					0.486394996	A	0.519441738	B																					0.264971209	A																
rs1768890	9	9740994	0.037799999	+	C	T	0.185349668	B	0.72684118	B									0.386119061	B	0.701640249	B	0.222100005	B	0.233718491	B	0.967199981	A	0.874127521	B	0.275489927	B	0.938461096			0.037799999		0.866363374	B												
rs1746789	9	9741064	0.042354194		A	C					0.25132645	B	0.45011838	A																					0.224882779	A																
rs1768892	9	9741606	0.007530914	+	C	T	0.474608748	A	0.262068649	B	0.444889816	A	0.642545186	B	0.345165442	A	0.071761364	A	0.564604422	A	0.486277508	A	0.449699998	B	0.173635557	B	0.971599996	A	0.139382097	B	0.042354194	B	0.146237467		0.985885966	A	0.786199987		0.570803205	B												
rs10977947	9	9741686	0.007530914	-	A	T	0.377444247	B	0.508682506	A					0.057766318	B	0.546188225	B	0.415581984	A	0.777103398	A	0.684000015	A	0.830423829	B	0.343699992	A	0.156966082	A	0.007530914	B	0.392016827	A		0.172199994		0.747735479	A												
rs1408120	9	9746718	0.261999995	-	A	G					0.488300214	A	0.795790352	A	0.579869001	B																																				
rs1408122	9	9746868	0.060318774																																						0.261999995	G	0.906400025	G	0.466500014	G	0.329400003	G			Top	(A/G)
rs2761710	9	9747220	0.060318774	-	A	C	0.295312652	B	0.467636999	B	0.501490535	A	0.485471371	A	0.99219127	B	0.751833552	A	0.401496258	A	0.658778106	A	0.563799977	B	0.52986249	B	0.968800008	A	0.640446248	B	0.060318774	B	0.135831597	A	0.51224065	B	0.332700014		0.724883237	B												
rs2761714	9	9748609	0.041152154																																						0.109700002	A	0.40290001	A	0.244499996	A	0.230399996	A	0.967800021	G	Top	(A/G)
rs1183408	9	9752533	0.041152154	+	A	G	0.654230504	B	0.041152154	B									0.662381606	B	0.086833525	A	0.243000001	B	0.161950919	A	0.990999997	A	0.082900612	B	0.197687521	B	0.061369923			0.053849999	A	0.939344892	A												
rs1174579	9	9752760	0.01299	-	A	G	0.736491028	B	0.948549157	A													0.364300013	A			0.67049998	A		B			0.57148146			0.613699973		0.510485392	B												
rs1174581	9	9753352	0.01299																																						0.026380001	C	0.01299	C	0.645799995	C	0.327300012	C	0.930899978	C	Bot	(T/C)
rs10977963	9	9756526	0.114145716	+	C	T					0.649611217	A	0.900330591	B																					0.777938464	B																
rs1174587	9	9757971	0.05136	-	C	T	0.114145716	A	0.769484397	B													0.265399993	B			0.368600011	A		B			0.19265509			0.469000012		0.164486644	A												
rs10465103	9	9759285	0.05136	-	A	T	0.121108238	A	0.464574957	B													0.05136	B			0.339899987	A					0.966109651	A		0.915300012		0.739084709	A												
rs768224	9	9760495	0.222800002	+	C	T					0.790046906	B	0.259982382	B	0.978182877	A																									0.78490001	G	0.222800002	G	0.726899982	A	0.43633001	A	0.279399991	A	Bot	(T/C)
rs768225	9	9760741	0.01346	-	A	G					0.639090632	B	0.668368376	B	0.762390069	A																									0.01444	T	0.01346	T	0.382699996	T	0.140499994	T	0.507799983	C	Bot	(T/C)
rs10977969	9	9762431	0.01346																																						0.022320001	T	0.227899998	T	0.437999994	T	0.291700006	T	0.812300026	T	Bot	(T/C)
rs2821505	9	9762724	0.022320001																																																	
rs10977970	9	9764194	0.016316916																																										0.748099983	T	0.953199983	C					Bot	(T/C)
rs10977972	9	9766856	0.016316916	+	C	G	0.417323198	B	0.13215297	A	0.594134731	B	0.551693701	A					0.076452204	A	0.321583796	A			0.952625211	B	0.623899996	B	0.36785504	A	0.099165826	B	0.016316916	A	0.049092326	B	0.045060001		0.248059898	A												
rs981791	9	9766936	0.048647737	-	A	G	0.158885296	B	0.686124404	B	0.857556085	B	0.924555712	B					0.679813692	A	0.98043077	B	0.255499989	B	0.323595955	B	0.620000005	B	0.632878715	B	0.262480709	B	0.340372935		0.988383997	A	0.521200001		0.799162006	A												
rs2821498	9	9767072	0.048647737	-	A	G	0.264032792	B	0.416642702	B	0.943593847	A	0.343540295	B	0.966736404	B	0.434225995	A	0.258361034	A	0.911610977	A	0.934700012	B	0.048647737	B	0.141299993	B	0.381806639	B	0.44524863	B	0.087258087		0.613319779	A	0.713199973		0.359186893	B	0.675400019	G	0.368999988	G	0.77670002	A	0.2016	A	0.177399993	A	Bot	(T/C)
rs4742618	9	9767361	0.164172143	+	A	C					0.245762074	B	0.537526457	B																					0.164172143	A																
rs2761717	9	9767960	0.064679351	-	A	T					0.944020642	A	0.898914006	A																					0.414944727	B																
rs2761717	9	9767960	0.064679351	-	A	T	0.064679351	A	0.884239185	B					0.931788195	B	0.536504863	A	0.920768912	B	0.881205068	B	0.926100016	A	0.463431401	A	0.176200002	A	0.715260884	B	0.523509398	A	0.938988407			0.782199979		0.719763873	A												
rs2821493	9	9768132	0.024546437																																						0.700399995	T	0.319000006	T	0.631200016	C	0.156900004	C	0.187299997	C	Bot	(T/C)
rs2761723	9	9768653	0.024546437	-	A	C	0.179811656	A	0.646979847	A	0.937812115	B	0.999086343	A	0.827913371	B	0.458483423	A	0.643521511	B	0.6020768	B	0.841899991	A	0.276282163	A	0.141299993	A	0.024546437	B	0.12738776	A	0.555921084	A	0.496396691	B	0.58039999		0.687821332	A	0.5176	T	0.242200002	T	0.575100005	G	0.216700003	G	0.180000007	G	Top	(A/C)
rs2476588	9	9769358	0.079769346	+	C	T	0.368767584	A	0.807736327	A					0.610139495	A	0.807261856	B	0.307866386	B	0.957431485	B	0.861199975	A	0.726149722	A	0.170499995	A	0.45779747	A	0.097752321	A	0.079769346	A		0.92750001		0.555283818	A												
rs2821473	9	9771551	0.211600006																																						0.537199974	G	0.221399993	G	0.928900003	A	0.512499988	A			Bot	(T/C)
rs1746793	9	9772303	0.211600006																																						0.556699991	G	0.211600006	G	0.974799991	G	0.522400022	A			BOT	(T/C)
rs1746794	9	9772351	0.073080003																																						0.262199998	C	0.424299985	C	0.6523	C	0.93809998	C			TOP	(A/G)
rs4740988	9	9773693	0.073080003																																						0.130700007	T	0.073080003	T	0.092600003	T	0.383599997	T	0.479299992	C	Top	(A/G)
rs16930279	9	9774730	0.090124005																																										0.935400009	C	0.643400013	T					Bot	(T/C)
rs2244516	9	9775540	0.02939	+	A	G	0.741481206	B	0.776597756	B	0.299701496	B	0.722093649	B	0.555585545	B	0.191829913	B	0.16603501	B	0.92656002	A	0.706399977	A	0.362323346	B	0.2597	B	0.090124005	B	0.828333252	A	0.465065454		0.224177367	A	0.459899992		0.097216133	B												
rs2382056	9	9775685	0.020063058	+	A	G	0.871141262	A	0.357771656	A	0.655223706	A	0.707250948	B	0.951108993	B	0.891258286	B	0.237972042	A	0.358172892	B	0.556900024	B	0.741778409	A	0.307099998	A	0.885133833	A	0.672384973	A	0.633551511	A	0.318728407	B	0.516300023		0.128642001	A	0.054620002	A	0.02939	A	0.082529999	A	0.348699987	A	0.729900003	G	Top	(A/G)
rs7874425	9	9775835	0.020063058	+	A	T	0.26551087	B	0.085060614	B													0.548600018	B			0.104099996	B		B			0.020063058			0.787500024		0.557990666	B												
rs10977976	9	9777587	0.038490001																																						0.227500007	G	0.038490001	G	0.737399995	G	0.652700007	A	0.582199991	A	Bot	(T/C)
rs17232558	9	9779202	0.074830016																																						0.627799988	C	0.530700028	C	0.380400002	T	0.556299985	T			TOP	(A/G)
rs10977977	9	9779362	0.037330002	-	A	T	0.451590384	B	0.155097668	B													0.591499984	B			0.146200001	B		B			0.074830016			0.469000012		0.556801402	B												
rs1174590	9	9780222	0.037330002																																						0.0634	T	0.037330002	T	0.086649999	T	0.653800011	T	0.738799989	C	Bot	(T/C)
rs2147070	9	9780306	0.046337271	+	C	G					0.812500127	B	0.046337271	B	0.937784038	B																																				
rs12004301	9	9780403	0.174999997																																										0.415300012	C	0.174999997	C					Top	(A/G)
rs12004395	9	9780854	0																																										0.226600006	C	0.867200017	C					Top	(A/G)
rs12004415	9	9780914	0	+	A	T	0.419257482	A	0.332742529	B													0.862800002	B			0		B		B		0.080982139			0.382600009		0.254568574	B												
rs12684906	9	9782326	0.218799993																																						0.495799989	C	0.425999999	C	0.965499997	C	0.289999992	C	0.666299999	C	Bot	(T/C)
rs1174592	9	9782811	0.045562475																																						0.218799993	T	0.271200001	T	0.511799991	T	0.469099999	T	0.858799994	T	Bot	(T/C)
rs2761734	9	9783285	0.045562475	+	A	C	0.104527738	A	0.045562475	A													0.048470002	A			0.260100007	A					0.844996957	A		0.441399992		0.359627219	B	0.252700001	C	0.898100019	A	0.486099988	C	0.597599983	C			Top	(A/C)
rs2821487	9	9783342	0.01061605																																						0.443599999	A	0.311399996	A	0.251500011	A	0.8125	A			Top	(A/C)
rs10977980	9	9784490	0.01061605	+	C	G	0.912878255	B	0.01061605	A	0.79052684	B	0.267199427	A	0.128072022	A	0.805672715	B	0.376650262	A	0.116782926	B	0.891700029	B	0.221697467	B	0.306899995	A	0.781837702	B	0.845388214	B	0.938443065		0.023317499	A	0.839100003		0.597733865	A												
rs10977981	9	9784527	0.093460001																																						0.723399997	T	0.325500011	T	0.550999999	T	0.740499973	T			BOT	(T/C)
rs1768869	9	9784545	0.093460001	+	C	T					0.175415369	B	0.496984618	B																					0.811597448	B																
rs1768869	9	9784545	0.074619008	+	C	T	0.947142194	B	0.894705792	B													0.263300002	B			0.476799995	B					0.820186754	A		0.758400023		0.101733094	A	0.202000007	G	0.826200008	G	0.093460001	A	0.144700006	A			Bot	(T/C)
rs10816182	9	9785185	0.016878958	-	A	C	0.494295348	A	0.278400431	B	0.699746873	A	0.536775744	B	0.393344956	B	0.641329136	B	0.227429264	B	0.950202796	A	0.366299987	A	0.435112905	B	0.629000008	A	0.861832644	A	0.732545307	A	0.494119889	A	0.792177016	B	1		0.074619008	B												
rs10816183	9	9785214	0.010494827	-	C	T	0.605161555	B	0.092856313	B													0.77579999	B			0.45449999	A					0.016878958			1			0.714530232	A												
rs2761735	9	9786116	0.010494827	-	A	G	0.062748748	B	0.338159316	B	0.142904932	B	0.913062203	B	0.090860194	A	0.034270824	A	0.131179308	B	0.897042938	B	0.515999973	B	0.778773237	B	0.223100007	B	0.508285059	B	0.936565888	B	0.010494827	A	0.201982948	B	0.644599974		0.077311616	A	0.625999987	C	0.482300013	C	0.970200002	T	0.855700016	T	0.335099995	C	Top	(A/G)
rs10977985	9	9786577	0	+	A	C	0.752019573	B	0.483005418	A	0.195885586	A	0.321981545	A	0.500307936	B	0.805579254	B	0.537700693	A	0.315598275	A	0.40169999	A	0.271734319	B	0.45449999	B	0.247848172	B	0.932320613	A	0.059512381	A	0.233215124	A	1		0.605609631	A	0.915400028	C	0.613699973	A	0.819299996	C	0.791599989	C	0.833199978	A	Bot	(T/G)
rs16930359	9	9786608	0	+	A	G	0.608231749	A	0.257891336	B	0.921072097	A	0.806402572	A					0.752123786	A	0.403597637	A	0.503799975	B	0.365956511	A	0		A	0.409762044	B	0.030368588	A	0.191591845	A	0.484508401	A	0.382600009		0.720978854	A												
rs10977990	9	9788243	0.091896344	+	C	T	0.091896344	A	0.187767242	B													0.169799998	B			0.62379998	A		B			0.1116533554			0.828100026		0.690238671	A												
rs10977991	9	9788666	0.081295765																																						0.470999986	G	0.774699986	G	0.339899993	A	0.956099987	A	0.097060002	G	Top	(A/G)
rs10120246	9	9789050	0.020190001	+	A	G	0.478202088	A	0.713984062	A	0.568848501	B	0.082575041	B					0.954065285	A	0.081295765	A	0.206300005	B	0.557910751	B	0.566900015	B	0.601211234	B	0.670905599	A	0.200933258	A	0.214974303	B	0.692099989		0.43870674	A	0.25060001	A	0.271299988	A	0.58829999	A	0.553499997	A			Top	(A/G)
rs2296171	9	9789476	0.020190001	+	A	G	0.150869407	B	0.142555992	A	0.458060912	A	0.634226731	B	0.066839195	B	0.272232539	B	0.840338975	B	0.58794792	A	0.020190001	A	0.15892032	B	0.8046	B	0.401972788	B	0.739248321	A	0.039153863	A	0.59232562	A	1		0.146424283	B												
rs1768881	9	9790546	0.349500001																																						0.474900007	C	0.443800002	C	0.349500001	C	0.668299973	A	0.854700029	A	Top	(A/C)
rs1746799	9	9790624	0.0018928																																						0.474299997	T	0.445300013	T	0.583199978	C	0.399899989	C	0.820800006	C	Top	(A/G)
rs4742621	9	9790931	0.0018928	-	A	T					0.113677346	B	0.0018928	A	0.701193619	A																																				
rs1323802	9	9791153	0.049479999	-	A	G					0.239872394	A	0.0767607 55	B	0.561494545	A																									0.049479999	T	0.145500004	T	0.797200024	C	0.578700006	C			BOT	(T/C)
rs1613507	9	9791755	0.126165269	+	A	G					0.137396662	A	0.3243911	A	0.126165269	A																									0.439399988	G	0.447299987	G	0.575600028	A	0.386799991	A	0.851300001	A	Bot	(T/C)
rs1830775	9	9791907	0.022804973	+	G	T					0.413927013	A	0.615568038	A	0.141699631	A																									0.388000011	T	0.414900005	T	0.575600028	G	0.355399996	G	0.853999972	G	Bot	(T/G)
rs1830775	9	9791907	0.000598618	+	G	T	0.027982352	B	0.022804973	A													0.707000017	B			0.234599993	A		B			0.420795496			0.8574		0.077992361	B	0.388000011	T	0.414900005	T	0.575600028	G	0.355399996

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn Strand	ACTG
rs10977994	9	9792404	0.011365046	-	A	C	0.10838944	B	0.154265851	B													0.613499999	B			0.330000013	B					0.034990404	A			0.520900011		0.011365046	A	0.456400007	G	0.734300017	G	0.411799997	T	0.879499972	T	0.07485	G	Bot	(T/G)
rs10977995	9	9792443	0.187999994	+	A	C	0.867630042	A	0.7652947	A													0.701200008	A			0.853500009	A		B			0.684635055				0.187999994		0.338675477	A												
rs2821490	9	9792458	0.003228011																																						0.360900015	T	0.40259999	T	0.531499982	C	0.355399996	C	0.76639998	C	Bot	(T/C)
rs1018589	9	9793807	7.59029E-05	+	A	G					0.462959549	B	0.003280011	B	0.045011441	A																																				
rs2296170	9	9793954	7.59029E-05	+	C	T					0.298289796	B	7.59029E-05	A	0.895446166	B																									0.02617	T	0.120700002	T	0.310200006	C	0.716199994	C	0.281800002	T	Top	(A/G)
rs1018590	9	9794313	0.062550001																																						0.062550001	G	0.1523	G	0.813000023	G	0.851499975	T			Top	(A/C)
rs2821491	9	9794718	0.084430002																																						0.217500001	C	0.169300005	C	0.903900027	C	0.439700007	T			TOP	(A/G)
rs4740990	9	9795134	0.04177																																						0.110399999	T	0.084430002	T	0.772400022	C	0.586700022	C	0.502799988	T	Bot	(T/C)
rs4742622	9	9795193	0.035730001																																						0.04177	A	0.05435	A	0.639999986	G	0.68629998	G			Top	(A/G)
rs10977997	9	9795496	0.035489999																																						0.844399999	T	0.685299993	T	0.035730001	T	0.385600001	T			BOT	(T/C)
rs1408130	9	9798250	0.035489999																																						0.03678	C	0.035489999	C	0.288899988	T	0.221399993	T			Bot	(T/C)
rs1768872	9	9799590	0.03678																																						0.03678	A	0.041329999	A	0.699599981	T	0.514100015	T			TOP	(A/T)
rs1746805	9	9802870	0.002069065																																						0.03796	T	0.061450001	T	0.0623	C	0.180399999	C			Bot	(T/C)
rs1768867	9	9804116	0.002069065	+	C	G	0.066031904	B	0.546347704	B	0.376225856	B	0.335825374	A	0.608283655	B	0.457365264	B	0.445026579	B	0.604192744	B	0.503000021	B	0.054265099	B	0.322299987	A	0.960847317	B	0.714768536	A	0.002069065		0.636359221	B	0.402399987		0.232399616	B												
rs2761741	9	9806063	0.05077																																						0.834800005	G	0.797399998	G	0.820699999	G	0.895299971	A	0.697300017	A	Top	(A/G)
rs2761743	9	9806955	0.026620001																																						0.079980001	A	0.169	A	0.05077	C	0.209299997	C			Bot	(T/G)
rs2761748	9	9807514	0.026620001																																						0.026620001	A	0.028109999	A	0.605199993	C	0.441399992	C	0.593100011	C	Top	(A/C)
rs2476591	9	9807842	0.0252	-	C	G	0.902810174	A	0.444087965	A													0.905499995	B			0.341199994	B					0.662753487	A			0.559599996		0.122575188	A												
rs912356	9	9808094	0.023949999																																						0.0252	T	0.036230002	T	0.328000009	C	0.278400004	C	0.718699992	C	Top	(A/G)
rs2761752	9	9809028	0.023949999																																						0.023949999	T	0.03221	T	0.261099994	C	0.273200005	C	0.631900013	C	Top	(A/G)
rs2761759	9	9811783	0.008249108	+	C	T	0.917113138	A	0.913707992	B					0.671558125	B	0.807272925	B	0.497066381	B	0.467006745	A	0.993799985	A	0.925327084	A	0.216999993	A	0.901870554	B	0.357427993	A	0.103889108				0.573300004		0.502498741	B												
rs108161690	9	9811895	0.008249108	+	A	C	0.113539174	B	0.620298892	A													0.136500001	A			0.986599982	B					0.008249108	A			0.694800019		0.335297189	B												
rs2476593	9	9814156	0.070009999	-	C	T	0.139679236	A	0.755338983	A													0.851300001	B			0.452499986	B		B			0.799881475				0.281599999		0.160236827	A												
rs10125401	9	9819018	0.014909661																																						0.620000005	A	0.2773	A	0.373600006	G	0.221399993	G	0.070009999	G	Bot	(T/C)
rs10816196	9	9819254	0.014909661	-	A	C	0.313530898	A	0.466672734	B	0.392781982	A	0.6700963	B	0.720319095	A	0.124849706	B	0.095761007	A	0.72867906	B	0.206200004	B	0.392545793	A	0.986599982	A	0.497120281	B	0.352504139	A	0.014909661	0.05978863	A	0.630900025		0.940095201	B												
rs1746813	9	9819690	0.015533857	-	C	G	0.351197313	B	0.874597021	A	0.015533857	B	0.753789625	A	0.908742035	B	0.411027818	B	0.570297013	B	0.62996115	B	0.155000001	B	0.662681444	B	0.369500011	B	0.718529659	B	0.420645831	B	0.366309656	A	0.954508241	A	0.896700025		0.635041748	A												
rs10978017	9	9819851	0.03057		C	T					0.989228965	B	0.322696219	B																					0.904576013	B																
rs7868673	9	9820675	0.001252509	+	A	G	0.690843641	A	0.646244672	A													0.978399992	B			0.788699985	B					0.075546951	A			0.086159997	B	0.963916421	B	0.03057	A	0.053410001	A	0.571200013	A	0.695299983	A	0.749300003	A	Top	(A/G)
rs1570591	9	9821068	0.001252509	-	A	C					0.868961939	A	0.001252509	B	0.629592013	B																									0.387600005	T	0.09629	T	0.800999999	T	0.766300023	G	0.166999996	G	Top	(A/C)
rs1570591	9	9821068	0.000186482	-	A	C	0.12148023	B	0.071501177	A	0.330205102	B	0.6549255	A	0.831187658	A	0.294709868	A	0.554684557	B	0.335775488	B	0.194900006	A	0.429247339	B	0.616999984	B	0.829390397	B	0.263472211	B	0.00318777	A	0.111933027	A	0.735400021		0.648970341	B	0.387600005	T	0.09629	T	0.800999999	T	0.766300023	G	0.166999996	G	Top	(A/C)
rs7856322	9	9821142	0.000186482	+	G	T					0.986563368	A	0.000186482	B	0.755745533	B																									0.065509997	G	0.218700007	G	0.791199982	T	0.968999982	T	0.72390002	G	Bot	(T/G)
rs7856322	9	9821142	0.050604519	+	G	T	0.365145549	A	0.663176551	A					0.725288236	A	0.449757408	B	0.276787805	A	0.111149952	A	0.462700009	B	0.893657103	A	0.898599982	B	0.979675423	B	0.320302176	A	0.96417291				0.121799998		0.717528537	A	0.065509997	G	0.218700007	G	0.791199982	T	0.968999982	T	0.72390002	G	Bot	(T/G)
rs1570592	9	9821209	0.005679626	+	A	G					0.120734285	A	0.050604519	B	0.858671532	A																									0.477899998	A	0.242799997	A	0.1083	A	0.415300012	A	0.92839998	G	Top	(A/G)
rs1570592	9	9821209	0.005679626	+	A	G	0.690052093	B	0.206157542	A	0.77414011	B	0.312864107	A	0.867017848	A	0.672965518	A	0.538684959	B	0.129440972	B	0.259499997	A	0.638588514	B	0.986599982	B	0.333532773	B	0.372237841	B	0.005679626	A	0.5675137	A	0.554799974		0.191618111	B	0.477899998	A	0.242799997	A	0.1083	A	0.415300012	A	0.92839998	G	Top	(A/G)
rs1570593	9	9821403	0.000999668	-	A	C					0.812249228	A	0.0128262 08	B	0.777448228	A																																				
rs1570593	9	9821403	0.000999668	-	A	C	0.046457014	B	0.229239859	A	0.953250096	B	0.988034082	A	0.892184826	B	0.89772217	B	0.605051696	B	0.744700422	B	0.352699995	A	0.674641326	B	0.616999984	B	0.986036675	B	0.073397771	B	0.000999668	A	0.410962109	A	1		0.45456281	B												
rs2821475	9	9821715	7.58392E-06	-	C	T	0.257274532	B	0.598131485	B					0.424388398	B	0.096986898	B	0.10739046	B	0.741636666	A	0.102200002	B	0.610271046	B	0.380600005	B	0.214781012	B	0.075100326	B	0.181163652	A			0.2867 0001		0.140096926	A												
rs2761763	9	9822245	7.58392E-06	+	C	T					0.427755835	A	7.58E-06	B	0.745757791	B																									0.065480001	C	0.163599998	C	0.925400019	C	0.93870002	T	0.945200026	C	Top	(A/G)
rs2761763	9	9822245	0.065480001	+	C	T	0.975303835	A	0.789419574	B	0.185646685	B	0.093090609	B	0.972307052	B	0.927411932	A	0.193929312	B	0.19911193	A	0.363299996	B	0.403004115	A	0.380600005	B	0.657660414	B	0.707645347	A	0.513078399	A	0.971430649	A	0.278200001		0.293172882	A	0.065480001	C	0.163599998	C	0.925400019	C	0.93870002	T	0.945200026	C	Top	(A/G)
rs10978024	9	9830407	0.028828578																																						0.297199994	T	0.146899998	T	0.966199994	T	0.878700018	C			TOP	(A/G)
rs10759094	9	9830822	0.028828578	+	C	G	0.330804812	A	0.393213877	A													0.270200014	A			0.084289998	A		B			0.028828578				0.789499998		0.0466602	B												
rs10978025	9	9831393	0.076990001	-	C	G	0.568113003	A	0.687919743	A													0.538500011	B			0.898599982	B		B			0.972839445				0.121299997		0.399475468	A												
rs7851513	9	9832176	0.076990001																																						0.076990001	C	0.217199996	C	0.98150003	A	0.903699994	A			BOT	(T/G)
rs7869788	9	9832282	0.001751039	+	C	T					0.786382634	A	0.300423156	B																					0.89853496	B																
rs7867030	9	9832542	0.00093626	+	A	G	0.247523147	B	0.001751039	A					0.451424502	B	0.277882046	A	0.563949632	B	0.216553018	A	0.310400009	A	0.20959332	B	0.441300005	A	0.967410031	B	0.080423112	B	0.0046289	A			0.440100014		0.511405371	A												
rs10978028	9	9833265	0.00093626	+	G	T	0.215314125	B	0.008048379	A													0.181999996	A			0.466399998	A					0.00093626	A			0.101300001		0.27962178	A												
rs10816206	9	9838393	0.011011855	+	G	T	0.567756139	A	0.778176787	A													0.79369998	B			0.466399998	B		B			0.034597488				0.101300001		0.749836443	B												
rs9408796	9	9838848	0.007164473	+	C	T	0.227705518	B	0.446635485	A	0.701023127	A	0.055092336	B	0.961197865	A	0.585779696	B	0.011011855	B	0.608412675	A	0.30250001	B	0.990286335	A	0.168500006	B	0.442132058	B	0.768322878	B	0.278316492	A	0.221118895	A	0.893599987		0.304094761	A												
rs10978034	9	9839056	0.007164473	+	C	G	0.281575181	B	0.010653108	A	0.506066319	B	0.220636922	A	0.508651095	A	0.554080973	A	0.134618882	A	0.102849074	B	0.337099999	A	0.007164473	B	0.466399998	A	0.136860267	A	0.226328647	A	0.031956476	A	0.567064704	A	0.282599986		0.4888928	B												
rs4740993	9	9841382	0.089110002																																						0.089110002	T	0.165900007	T	0.844299972	T	0.551199973	C	0.773100019	T	Bot	(T/C)
rs9407448	9	9842100	0.055880806																																						0.343899995	A	0.326900005	A	0.549199998	G	0.371499986	G			TOP	(A/G)
rs973916	9	9842432	0.055880806	+	C	T					0.534928021	B	0.055880806	B	0.408609711	A																																				
rs7033762	9	9843397	0.163499996																																						0.932900012	G	0.967999995	G	0.848999977	A	0.51849997	A			Bot	(T/C)
rs12377691	9	9845408	0.000195578																																						0.426499993	C	0.163499996	C	0.263799995	C	0.648699999	C			TOP	(A/C)
rs10816208	9	9846476	0.000195578	-	C	G	0.085085138	B	0.716046449	A	0.000195578	A	0.143597557	B	0.238044923	A	0.688072868	B	0.476320746	B	0.456078517	B	0.724600017	B	0.953120864	B	0.761200011	B	0.9489752	A	0.925804816	B	0.503798172	A	0.789857812	A	0.530499995		0.584028779	A												
rs12004509	9	9846544	0.000672045	+	A	G	0.583617543	B	0.6841831	B	0.102685945	A	0.936768626	B	0.555165332	A	0.520255964	A	0.152786669	B	0.574892627	A	0.355100006	B	0.406376129	A	0.170200005	B	0.069686621	B	0.901584252	A	0.013232356	A	0.010811706	A	0.349599987		0.184961705	A												
rs7851330	9	9847166	0.000672045	+	C	T	0.629542835	A	0.302269974	B	0.561307526	B	0.000672045	B	0.972556207	A	0.655927059	A	0.034659129	A	0.448145953	B	0.041400001	B	0.114976305	A	0.466399998	B	0.589033474	B	0.718059051	B	0.064913683		0.078926871	B	0.493099988		0.984589759	B												
rs10978037	9	9847419	0.087439999	-	A	T	0.952208891	A	0.454767132	A	0.285873775	A	0.304825288	B	0.531564718	B	0.686462542	B	0.142914585	B	0.157446412	B	0.840699971	B	0.169837684	B	0.761900008	B	0.447724786	B	0.581140956	B	0.801971373		0.872353124	A	0.153799996		0.53699489	A												
rs1408118	9	9848060	0.037687684																																						0.087439999	C	0.341899991	C	0.996999979	C	0.727900028	C	0.691600025	C	Top	(A/G)
rs10125513	9	9849571	0.021974208	+	A	C	0.110781301	B	0.0515259	A													0.577199996	A			0.466399998	A					0.0376876 84	A			0.142399997		0.505940516	B	0.299899995	A	0.174199998	A	0.333200008	A	0.642700017	A			Top	(A/C)
rs13284005	9	9849750	0.021974208	-	A	C	0.566709364	A	0.749145115	A													0.536499977	B			0.506900013	B					0.021974208	A			0.723699987		0.900055845	A												
rs1570594	9	9849772	0.043041218		C	T					0.043041218	A	0.055652355	B																					0.848027212	B																
rs10978043	9	9850402	0.027860001	+	C	T	0.77897553	A	0.161251991	B													0.152099997	B			0.65259999	A					0.757801324	A			0.149499998		0.518629876	B	0.126699999	T	0.354699999	T	0.700200021	C	0.989799976	T			TOP	(A/G)
rs16874	9	9850735	0.027860001	+	C	T	0.920566673	A	0.158738444	A	0.609884836	A	0.541568504	A	0.652544967	B	0.680072862	B	0.999687837	A	0.474183655	B	0.089840002	A	0.51787839	A	0.672100008	B	0.268546916	B	0.68160637	B	0.078135383	A	0.511210778	A	0.239500001		0.513717573	B	0.027860001	C	0.037700001	C	0.683300018	C	0.396699995	C	0.558499992	T	Top	(A/G)
rs2147065	9	9850780	0.070905897	-	A	G	0.606964795	B	0.889527907	B													0.854499996	A			0.745500028	A					0.837775821	A			0.692499995		0.070905897	B	0.53609997	C	0.601300001	T	0.1646	T	0.712000012	T			Top	(A/G)
rs9407450	9	9850872	0.010704231	-	G	T	0.675576834	B	0.588281094	A	0.298262736	B	0.48443216	B	0.694943257	B	0.444177034	A	0.286132572	B	0.989826584	A	0.702899993	B	0.127989669	A	0.280600011	B	0.215843039	B	0.632563448	A	0.70012719		0.693177358	A	0.071029998	B	0.986712894	A	0.155900002	C	0.300300002	C	0.851800025	A	0.387800008	A	0.744000018	A	Bot	(T/G)
rs10816216	9	9851006	0.004586588	+	G	T	0.056014231	A	0.024002186	B	0.26213198	A	0.537158008	B	0.817336296	B	0.145624218	B	0.520793723	A	0.363346899	A	0.681800008	B	0.0440798	A	0.466399998	B	0.11497992	B	0.36791242	A	0.0107042 31		0.604190839	B	0.142399997		0.719960241	A												
rs2209192	9	9852171	0.004586588	+	C	G	0.846686148	B	0.004586588	A													0.035569999	A			0.903900027	A					0.241394956	A			0.140200004		0.741092684	B												
rs4742630	9	9853227	0.016179999	-	A	C									0.726463499	B	0.155445509	B	0.644860626	B																							0.016179999	T	0.150700003	T	0.234200001	T	0.44569999	T	0.519999981	G	Top	(A/C)
rs4742630	9	9853227	0.016179999	-	A	C	0.738094017	B	0.274562986	A	0.598360947	B	0.473718917	B	0.762922803	B	0.911907186	B	0.899872724	B	0.227528248	A	0.071039997	A	0.490321253	A	0.975000024	B	0.071707505	B	0.849335566	A	0.254502793	A	0.493264555	A	0.059749998	B	0.146763119	B	0.016179999	T	0.150700003	T	0.234200001	T	0.44569999	T	0.519999981	G	Top	(A/C)
rs9299102	9	9853876	0.006636519	-	C	T					0.945485776	B	0.379590986	A																																						
rs17339514	9	9855228	0.006636519	-	C	G					0.372144359	B	0.006636519	B																					0.775560524	B																
rs10514818	9	9855816	0.001887038	+	A	C					0.613308484	A	0.022625666	A																																						
rs10514818	9	9855816	0.001887038	+	A	C	0.338522072	B	0.34583148	B									0.208609758	B	0.852348635	B	0.590799987	B	0.154929917	A	0.629000008	B	0.017482383	B	0.170409636	A	0.0018877 38				0.318899989		0.320739772	B												
rs7341919	9	9855965	0.028853458	+	C	G	0.666639459	A	0.607502064	B	0.984542059	A	0.035383314	A					0.182850723	A	0.835050338	B	0.706399977	A	0.028853458	B	0.629000008	A	0.199371413	A	0.034209466	B	0.051585417	A	0.21384465	A	0.318899989		0.946994232	A												
rs7341699	9	9855067	0.04884153	+	C	T					0.736977796	A	0.421415088	B					0.04884153	A	0.479322427	A			0.077202904	B			0.060728697	A	0.111416048	B			0.468601704	B																
rs6477423	9	9856177	0.015809591	-	A	G	0.473115403	A	0.871399344	B	0.924386687	B	0.901555943	A					0.128055199	B	0.992383965	B	0.281100005	B	0.187760239	A	0.406300008	B	0.206581035	B	0.268115454	A	0.166729812		0.846143171	A	0.591400027		0.175850478	B												
rs6477424	9	9856363	8.29079E-05	-	C	T	0.759224864	B	0.533358381	A	0.841380601	B	0.176601499	B					0.320665303	A	0.3902559	A	0.542500019	A	0.116396163	B	0.629000008	A	0.832704369	B	0.166237025	B	0.015809591	A	0.630901602	A	0.318699986		0.678485772	A												
rs10491918	9	9857271	8.29079E-05	-	A	G					0.999022418	B	8.29079E-05	A																																						
rs10491917	9	9858467	0.015830251	+	A	G					0.369028036	B	0.015830251	A	0.177025578	A																																				
rs10978048	9	9859171	0.00123463	+	C	G	0.442788269	B	0.321097446	A	0.800074038	B	0.314033469	B	0.869399418	B	0.506472413	B	0.803196409	A	0.290840128	A	0.223199993	A	0.696177391	A	0.691999972	B	0.724565449	A	0.412144744	B	0.984634314	A	0.486330838	A	0.679499984		0.486771825	B												
rs10978049	9	9859714	0	+	G	T	0.182658094	A	0.681205803	A	0.749360495	A	0.916674514	B					0.93128246	A	0.667257856	A			0.415756895	A	0.623899996	B	0.1125296	B	0.231539998	B	0.427760942	A	0.758876818	B	0.733699977		0.00123463	A	0.296999991	T	0.301099986	T					0.128700003	G	Bot	(T/G)
rs7031251	9	9864215	0	+	A	G	0.738281151	A	0.000533714	A													0.527700007	A			0		B		B		0.037076302				1		0.25020087	B												
rs11791059	9	9866096	0.067693913																																						0.40079999	C	0.404300004	C	0.642400026	T	0.870899975	T			BOT	(T/C)
rs10978056	9	9866564	0.067693913	+	A	G					0.067693913	A	0.790734152	B																					0.804546369	A																
rs10978056	9	9866564	0	+	A	G	0.27154033	B	0.31960959	A					0.107783066	A	0.470575616	B	0.495229945	A	0.66037657	B	0.409099996	A	0.670738517	A	0.366400003	B	0.918034728	B	0.72348533	A	0.151111818				0.694500029		0.845294103	B												
SNP_A-2288822	9	9868076	0	+	A	G	0.627028219	A	0.482932231	B	0.519979976	B	0.650179363	A	0.950806975	B	0.376484002	A	0.11154373	A	0.94198267	B			0.260278745	B	0	A	0.08938917	A	0.909031753	A	0.21176254	A	0.926814307	B	0.2141000 03		0.771151669	B												
rs41346645	9	9868076	0	+	A	G	0.627028219	A	0.482932231	B	0.519979976	B	0.650179363	A	0.950806975	B	0.376484002	A	0.11154373	A	0.94198267	B			0.260278745	B	0	A	0.08938917	A	0.909031753	A	0.21176254	A	0.926814307	B	0.2141000 03		0.771151669	B												
rs10121247	9	9868687	0	-	A	G	0.215811997	A	0.281827283	B													0.726499975	B			0.629000008	A					0.010621101	A			0.079920001	A	0.807156376	B												
rs7865655	9	9871015	0	-	C	T	0.73706556	A	0.872951019	B	0.293916827	A	0.196472763	A					0.037441277	B	0.264104853	B	0.945500016	B	0.129653348	B	0	A	0.731133916	A	0.856580935	B	0.007956282	A	0.887236893	B	0.560500026		0.920522557	B												
rs10978059	9	9871068	0.000224066	-	C	T	0.218124015	B	0.27643823	A	0.485815928	B	0.772310356	B					0.866862488	B	0.852388293	B	0.615700007	B	0.762008225	B	0.629000008	B	0.69669978	B	0.139051384	A	0.000224066		0.136066024	B	0.322400004		0.819869322	B												
rs7852681	9	9871291	0.04487243		C	T					0.294346284	B	0.390618496	A																					0.76457527	A																
rs7852681	9	9871291	0	-	C	T	0.510374896	B	0.305485296	B									0.04487243	A	0.898907561	A	0.615700007	B	0.387133567	B	0.629000008	B	0.867476935	B	0.962243165	A	0.090004706				0.2755		0.394150419	B												
rs12002239	9	9872163	0	-	C	T	0.314238572	B	0.983041693	B													0.944199979	B			0		B		B		0.451561327				0.538999975		0.383095876	A					0.228799999	A	0.115099996	A			Bot	(T/C)
rs7856920	9	9872367	0.016860681	-	C	T					0.678272319	B	0.49602795	A																																						
rs10514817	9	9872403	0.016860681	-	A	G					0.722059308	B	0.016860681	A	0.425432555	B																																				
rs10120185	9	9872950	0.045779999																																						0.64420002	T	0.347600013	T	0.228400007	T	0.101499997	T			Top	(A/C)
rs4313211	9	9874182	0.009863	-	A	T	0.528085525	A	0.439457492	A													0.559899986	A			0.045779999	B		B			0.916240526				0.915700018		0.827995172	B												
rs10117984	9	9874561	0.009863	-	A	G	0.010437646	B	0.381795055	B													0.658599973	A			0.956799984	A		B			0.193666267				0.133000001		0.239803714	A	0.567900002	C	0.308899999	C

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn Strand	ACTG
rs16930512	9	9878272	0.217199996																																					0.250699997	A	0.493600011	A	0.615700007	A	0.217199996	A	0.603500009	A		Bot	(T/C)
rs7853562	9	9880747	0.107000001																																								0.483999997	C	0.39379999	C				Bot	(T/C)
rs4742634	9	9880962	0.045499999																																					0.107000001	C	0.138899997	C	0.711499989	C	0.205500007	C	0.60589999	T		Top	(A/G)
rs7872069	9	9880993	0.045499999																																										0.045499999	C	0.230100006	C				Bot	(T/C)
rs10978065	9	9883002	0.035461344																																					0.553600013	A	0.316700012	A	0.130199999	A	0.065350004	A				Bot	(T/C)
rs10978066	9	9883071	0.035461344	+	A	G	0.433205473	A	0.035461344	B													0.264499992	B			0.532000005	A		B			0.882616936				0.907299995		0.607403086	B	0.874800026	G	0.976700008	G	0.058869999	G	0.0616	G				TOP	(A/G)
rs12005505	9	9883740	0	+	A	C	0.140276499	A	0.937057596	B													0.891200006	A			0.809899986	A					0.9108211	A			0.561999977		0.28323862	A												
rs10122065	9	9884322	0	-	A	G	0.39172719	A	0.064475161	B	0.286275519	A	0.121324929	A					0.800818548	A	0.814764253	A	0.78640022	A	0.434171361	A	0	B	0.833385586	B	0.27407895	B	0.113966173		0.515843713	B	1		0.828421529	B												
rs12006397	9	9884432	0.032730855	-	A	T	0.633044434	A	0.852806574	A													0.954900026	A			0.888899982	B					0.032730855	A			0.477499992		0.707844306	A												
rs7874066	9	9885583	0.029580001	+	C	G	0.117045539	A	0.178018934	B													0.551100016	B			0.471399993	A		B			0.30555132				0.489600003		0.890050374	B												
rs7874380	9	9885814	0.029580001																																					0.242699996	T	0.599699974	T	0.323399991	C	0.029580001	C				BOT	(T/C)
rs17242717	9	9885998	0.169238381																																					0.681100011	G	0.170499995	A	0.996100009	A	0.985599995	A	0.746200025	A		Top	(A/G)
rs10491914	9	9886971	0.169238381	+	C	T					0.270957097	B	0.353452002	A	0.169238381	B																								0.171499997	G	0.676599979	A	0.204500005	A	0.372700006	A				Top	(A/G)
rs10978072	9	9887866	0.054382099																																					0.6347	A	0.251500011	G	0.401800007	G	0.72329998	G	0.569800019	G		Top	(A/G)
rs10759095	9	9888577	0.054382099	-	G	T	0.178006773	B	0.054382099	A													0.503600001	A			0.924000025	B					0.326746491	A			0.1866		0.964545613	B												
rs10117170	9	9888870	0.097319998																																					0.53609997	T	0.372099996	G	0.380699992	G	0.804799974	G	0.308099985	G		Top	(A/C)
rs12344667	9	9889302	0.097319998	-	C	T	0.401154177	A	0.974869362	B													0.425500006	A			0.886399984	B		B			0.777149809				0.097319998	A	0.189246463	B												
rs4629931	9	9890480	0.097319998	-	C	G	0.953818727	B	0.860316158	B													0.379200012	B			0.771799982	A					0.672272346	A			0.097319998	B	0.295810109	A												
rs7846872	9	9891657	0.02701919	-	C	G					0.662603406	B	0.313019582	B	0.16726888	B																																				
rs7846872	9	9891657	0.02701919	-	C	G	0.596009145	B	0.325180554	A													0.406899989	A			0.478100002	B		B			0.02701919				0.233799994		0.266084157	B												
rs16924754	9	9893101	0.026215449	+	A	G	0.027769605	A	0.233427975	B													0.734000027	A			0.8046	A					0.260132842	A			0.728100002		0.044419738	B												
rs16930522	9	9894274	0.026215449	+	A	G	0.183795805	A	0.967590441	A													0.592700005	A			0.609499991	A					0.400241695	A			0.223299995		0.026215449	B	0.748000026	G	0.925400019	A	0.590300024	A	0.832499981	A				Top	(A/G)
rs10978074	9	9894481	0.012823563	+	C	T	0.036023791	A	0.367995079	B													0.42050001	A			0.623899996	A		B			0.984893429				0.391799986		0.15138808	B	0.847199976	T	0.941799998	T	0.945500016	C	0.507099986	T	0.92900002	T		Top	(A/G)
rs10816220	9	9894611	0.00643912	-	G	T	0.466557521	B	0.079656835	A													0.390500009	A			0.862999976	B					0.012823563	A			0.018449999		0.475421958	B												
rs7862769	9	9895178	0.00643912	+	A	G	0.025992255	B	0.00643912	A													0.330599994	A			0.828599989	B					0.050517968	A			0.449900001		0.683918235	B	0.235699996	A	0.304199994	A	0.02052	A	0.017510001	A				Bot	(T/C)
rs11999385	9	9895809	0.027593906	+	C	T	0.453646317	A	0.523347912	B													0.784300029	B			0.433400005	A					0.897653552	A			0.269699991		0.719558496	A	0.118699998	T	0.944400013	T	0.243900001	C	0.235799998	C	0.222399995	C		Top	(A/G)
rs10491913	9	9896906	5.09672E-06	-	C	G					0.619017041	B	0.027593906	A	0.261825769	A																																				
rs10491912	9	9897092	5.09672E-06	+	C	G					0.377192761	B	5.10E-06	A																																						
rs7045825	9	9897839	0.028093804	+	C	T					0.400157413	B	0.553205694	B					0.123360498	B	0.101458172	B			0.247675588	B			0.150204662	B	0.376734699	A			0.766520722	A														
rs4740998	9	9897987	0.028093804	+	C	T	0.536977537	B	0.028093804	A	0.327188397	A	0.126174281	B					0.728706144	B	0.687783098	A	0.080059998	A	0.702679639	A	0.138099998	B	0.981775576	A	0.408730329	A	0.181243642	A	0.130438292	B	0.050519999	A	0.720956701	A	0.460099995	C	0.843400002	T	0.779100001	C	0.629800022	C			Top	(A/G)
rs10978077	9	9898296	1.84523E-07	-	C	T	0.699589243	A	0.49877411	B	0.644375361	A	0.685532937	A	0.399351774	A	0.597809121	A	0.291794951	B	0.795343894	B	0.030990001	A	0.03329979	A	0.792100012	A	0.134881132	B	0.310473379	B	0.069020382		0.478960745	B	0.101599999		0.107927411	A												
rs10759099	9	9898492	1.84523E-07	+	C	T	0.35579309	B	0.067374642	A													0.679199994	A			0.564000011	A		B			1.85E-07				0.782800019		0.649787516	B												
rs10759100	9	9898722	0.047616411	-	A	G	0.449528788	B	0.302217924	A	0.445462476	B	0.631883454	B	0.594975264	B	0.740034721	A	0.946754914	A	0.821158016	B	0.295300007	B	0.061920978	B	0.752300024	B	0.933700493	B	0.910064595	B	0.047616411		0.286687944	A	0.097130001	A	0.11263613	B	0.802299976	T	0.271800011	T	0.159099996	T	0.177100003	T	0.324400008	T		Bot	(T/C)
rs10978078	9	9898821	0.048912493	+	C	T	0.784726525	B	0.610697998	A	0.441579974	A	0.687849907	A	0.823913473	A	0.576040693	B	0.817224392	A	0.048912493	A	0.060989998	A	0.889562214	B	0.2579	A	0.373623164	B	0.231712472	B	0.392754049		0.733504404	B	0.096299999	B	0.556243318	A												
rs17243452	9	9899232	0.060947288	-	A	G	0.535432178	B	0.255839696	B																	0.745500028	A					0.276011742	A			0.769200027		0.130600539	A												
rs10759101	9	9899726	0.001609258	-	C	T	0.753476801	B	0.135691816	A	0.064069379	B	0.715449252	A	0.268129136	B	0.444000055	B	0.16960953	A	0.956720497	A	0.561699987	B	0.060947288	B	0.752300024	B	0.98983848	B	0.672365418	B	0.564918635	A	0.973871014	A	0.150299996		0.244537179	B	0.906300008	G	0.35589999	G	0.166500002	G	0.086929999	G	0.341899991	G		Bot	(T/C)
rs12348066	9	9900028	0.001609258	-	A	G	0.809131357	B	0.593634049	A													0.344500005	B			0.691900015	B		B			0.001609258				0.855199993		0.580030941	B												
rs10759102	9	9900123	0.052760001	+	A	G					0.380543887	A	0.285876356	B																					0.989704982	B							0.294200003	G	0.057089999	G	0.36559999	G	0.219799995	G	0.052760001	G		Top	(A/G)
rs10759102	9	9900123	0.052760001	+	A	G	0.670292889	B	0.151101757	B													0.954699993	A			0.365399987	B					0.624021755	A			0.177699998		0.925565614	A	0.294200003	G	0.057089999	G	0.36559999	G	0.219799995	G	0.052760001	G		Top	(A/G)
rs47411000	9	9900922	0.199900001																																					0.797200024	C	0.325899988	C	0.277000001	C	0.298999995	C				Top	(A/C)
rs10978080	9	9900993	0.133200005																																					0.244499996	C	0.450899988	C	0.497999996	T	0.314399988	T	0.199900001	C		Top	(A/G)
rs16930559	9	9901283	0.0103																																					0.135399997	T	0.133200005	T	0.402200013	C	0.169400007	C				Bot	(T/C)
rs10816226	9	9902338	0.0103																																					0.864700019	T	0.207699999	C	0.0103	C	0.02451	C				Top	(A/G)
rs10816229	9	9902827	0.020956697	-	G	T	0.67184367	B	0.763319475	A													0.204300001	B			0.368600011	B		B			0.093678857				0.02942		0.502494074	B	0.820800006	A	0.223800004	C	0.663200021	C	0.641099989	C				BOT	(T/G)
rs7853575	9	9903106	0.020956697	+	A	G	0.121757731	A	0.779587338	B	0.281094917	A	0.832800941	A	0.761044476	A	0.651018699	B	0.162337921	B	0.317987818	A	0.292100012	A	0.151647412	A	0.995999992	A	0.020956697	B	0.548028319	A	0.581711099		0.560221531	A	0.032280022		0.246082184	A												
rs10978082	9	9903373	0.031988807	+	A	C	0.338775359	A	0.645279978	B	0.324095538	B	0.630496786	A	0.241004001	A	0.61815517	A	0.420168087	B	0.684375447	A	0.321099997	A	0.308359436	A	0.995999992	A	0.06869082	B	0.392965094	B	0.031988807		0.765015193	A	0.059300002	B	0.493223225	A	0.649399996	A	0.265899986	C	0.251899988	C	0.184400007	C	0.301200002	C		Top	(A/C)
rs10978083	9	9904428	0.04214	-	A	G	0.315952228	A	0.549370374	B													0.382600009	A			0.1567	B					0.739385443	A			0.081299998	B	0.882642814	B	0.687300026	C	0.056469999	C	0.970700026	T	0.65899998	C				TOP	(A/G)
rs10816230	9	9904448	0.018056085	-	A	G	0.604682865	B	0.068726272	B	0.635855362	B	0.196068974	B	0.847700273	A	0.93091154	A	0.749897755	B	0.242341649	B	0.157900006	A	0.990999741	B	0.852500022	B	0.083419545	B	0.360719634	B	0.060864826		0.839565237	A	0.04214		0.573532459	A												
rs13286918	9	9904486	0.018056085	+	A	T	0.087429763	B	0.367634574	A													0.820100009	B			0.73269999	A		B			0.018056085				0.1611		0.943477681	A												
rs4461956	9	9905186	0.099289998																																					0.712400019	A	0.890600026	A	0.720499992	A	0.810899973	C	0.754800022	C		Bot	(T/G)
rs7867164	9	9906467	0.099289998																																					0.099289998	T	0.210899994	C	0.926400006	T	0.649100006	C				TOP	(A/G)
rs7859837	9	9907049	0.018689999	+	C	T	0.24710361	A	0.674160761	B													0.156900004	A			0.226500005	B					0.184118764	A			0.233700007		0.570144183	B												
rs10978085	9	9907390	0.018689999	+	C	G	0.126411403	A	0.346831272	B													0.085560001	A			0.675899983	A					0.179613403	A			0.0186689999		0.871266871	A												
rs2382062	9	9908634	0.426299989																																					0.426299989	A	0.539099991	A	0.447100014	A	0.640100002	A				TOP	(A/G)
rs4742640	9	9908976	0.01816																																					0.538200021	G	0.458200008	T	0.910399973	T	0.922800005	G				BOT	(T/G)
rs10816235	9	9910242	0.01816																																					0.389099985	T	0.497000009	T	0.01816	G	0.03582	G				Top	(A/C)
rs7849581	9	9914724	0.025629999	-	A	G	0.149407444	A	0.248613055	B													0.043370001	B			0.09832	A					0.759573074	A			0.582499981		0.127134943	A	0.3486	C	0.584399998	C	0.025629999	C	0.03035	C				Bot	(T/C)
rs10816237	9	9914799	0.247600004	+	A	G	0.254544066	B	0.79132012	A													0.247600004	A			0.440400004	B		B			0.473751155				0.517099977		0.677398375	A												
rs12004295	9	9916519	0.288599998																																					0.288599998	A	0.438300014	A	0.618099988	A	0.416399986	A				BOT	(T/C)
rs10816239	9	9916888	0.378500015																																					0.378500015	A	0.5898	A	0.987500012	A	0.873199999	A	0.682799995	A		Bot	(T/G)
rs12683380	9	9919916	0.416500002																																					0.624599993	G	0.842899978	G	0.421000004	A	0.416500002	A	0.665300012	A		Bot	(T/C)
rs2382082	9	9927753	0.005123833																																					0.457100004	A	0.676500022	A	0.966799974	A	0.891700029	A	0.816799998	G		Top	(A/G)
rs7027038	9	9928319	0.005123833	+	C	G	0.571583307	A	0.180590454	A					0.168399053	B	0.60435151	B	0.092854973	B	0.073575211	A	0.779299974	B	0.612980126	A	0.065130003	B	0.072222394	B	0.667897995	A	0.005123833				0.336100012		0.666713407	A												
rs10816256	9	9928443	0.007996577	+	A	G	0.920090889	A	0.215073622	A	0.159435172	A	0.316137103	A	0.192688319	B	0.877088561	B	0.081620962	B	0.388552932	A	0.5722	B	0.182400288	B	0.065130003	B	0.056482812	B	0.64749999	B	0.022445023		0.794850007	A	0.180899993		0.602094628	A												
rs10816257	9	9928475	0.007996577	+	A	G	0.483867486	A	0.207330744	A	0.458275088	A	0.666609494	A	0.588025256	B	0.639718544	A	0.017852943	B	0.425056816	A	0.802999973	A	0.527848596	B	0.065130003	B	0.288588498	B	0.688121778	A	0.007996577		0.938701926	B	0.385500014		0.762161802	A												
rs7849423	9	9929766	0.227759491																																					0.515699983	T	0.796700001	T	0.297500014	C	0.25729999	C	0.635699987	T		Top	(A/G)
rs10491911	9	9929880	0.227759491	+	C	G					0.716679821	B	0.576715658	B	0.227759491	B																																				
rs10759111	9	9930126	0.272004778																																					0.321799994	T	0.422899991	T	0.774399996	T	0.657400012	T	0.842599988	T		Bot	(T/C)
rs7871307	9	9930264	0.19151102	-	G	T					0.693955546	B	0.272004778	B																																						
rs4636255	9	9930329	0.19151102	-	C	T					0.663106013	A	0.823494553	B	0.19151102	A																								0.617200017	A	0.708299995	A	0.994000018	G	0.936800003	G				Top	(A/G)
rs10978118	9	9930389	0.07113																																					0.852599978	C	0.537599981	C										TOP	(A/G)
rs7467612	9	9930521	0.07113																																					0.64319998	A	0.430599988	A	0.07113	G	0.1215	G	0.396899998	A		Top	(A/G)
rs4336661	9	9930554	0.052515225																																					0.333000004	A	0.435600013	A	0.743700028	A	0.598399997	A				TOP	(A/G)
rs1989339	9	9930737	0.052515225	+	C	T					0.656419929	B	0.052515225	A																																						
rs1989338	9	9930769	0	-	C	T					0.76348336	A	0.107886181	B	0.478374708	A																																				
rs16930649	9	9931673	0	+	A	T	0.986853233	A	0.820287992	A																	0	B		B			0.293925787				0.77670002		0.015542829	A												
rs16930650	9	9933040	0.000219593	+	C	T	0.473549732	A	0.276680793	B													0.255199999	A			0.177300006	B		B			0.153932805				0.349700004		0.76457006	A	0.933300018	T	0.736699998	C	0.932799995	C	0.5449	T				TOP	(A/G)
rs10491910	9	9933196	0.000219593	-	A	C					0.012269589	B	0.000219593	A	0.243408068	A																																				
rs10491910	9	9933196	0.02674	-	A	C	0.033092913	A	0.446539539	B													0.099809997	B			0.099809997	B		B			0.488929906				1		0.918248803	A												
rs6477426	9	9933289	2.66679E-07	-	C	T	0.29326157	B	0.863239674	A													0.167199999	A			0.02674	B		B			0.419014298				0.078259997	A	0.581674132	A	0.290600002	A	0.511600018	A	0.731100023	A	0.660300016	A	0.904399991	A		Bot	(T/C)
rs10514816	9	9933367	2.66679E-07	-	A	C					0.114860683	A	2.67E-07	B																															0.326200008	A	0.5528	A				Bot	(T/G)
rs10514816	9	9933367	0.126202338	-	A	C	0.261595184	B	0.485170392	A													0.771600008	B			0.343699992	A					0.418162856	A			1		0.508763183	A							0.326200008	A	0.5528	A				Bot	(T/G)
rs7854099	9	9933631	0.116505948	+	A	G	0.14803705	B	0.84299331	A													0.917599976	A			0.333799988	B		B			0.126202338				0.515100002		0.643744474	A							0.196700007	A	0.529900014	A		Top	(A/G)
rs16930657	9	9933710	0.07195611	+	G	T					0.406321197	B	0.116505948	B																					0.232752658	A									0.246900007	T	0.595600009	T		Bot	(T/G)
rs16930657	9	9933710	0.001548791	+	G	T	0.904822836	B	0.07735011	A													0.357499987	A			0.289200008	A		B			0.07195611				1		0.657999502	A							0.246900007	T	0.595600009	T		Bot	(T/G)
rs10978120	9	9934268	0.001548791	+	A	G	0.006606652	B	0.603856201	B	0.001548791	B	0.131870348	B	0.227659357	B	0.659851202	A	0.797175691	B	0.993441057	B	0.268999994	B	0.11883646	B	0.152700007	A	0.901877076	B	0.378025762	B	0.432144443	A	0.129310794	A	0.50819999		0.081579948	B												
rs7848313	9	9934811	0.002668	+	A	T	0.890811244	B	0.042567791	B													0.483500004	A			0.936200023	A		B			0.410164398				0.613699973		0.348290183	B												
rs10759112	9	9935265	0.002668	+	A	C	0.43216493	B	0.902918838	A	0.427927062	B	0.947783131	B	0.575865234	B	0.205790068	B	0.303519247	B	0.826913037	A	0.002668	A	0.657273145	A	0.02674	B	0.494974062	B	0.732083271	A	0.125417228		0.995293209	A	0.114100002		0.998256178	A												
rs10739205	9	9935571	0	+	C	T					0.554986602	A	0.676993898	A																					0.659378394	B																
rs10978121	9	9935648	0	+	C	T	0.762247323	B	0.000402295	A	0.092724254	A	0.091738823	A	0.585602323	B	0.217440784	A	0.584202395	A	0.026274485	B	0.03331	B	0.676408207	A	0	B	0.860635972	B	0.558113267	A	0.584476706		0.627917918	B	1		0.188640041	B	0.342599988	T	0.466600001	T	0.304899991	T	0.238000006	T			Bot	(T/C)
rs12554017	9	9936835	0	-	C	G	0.809888073	B	0.409994136	A	0.039616055	B	0.26690871	A	0.375192057	A	0.977209555	B	0.158464218	A	0.93823903	B	0.223900005	A	0.1038983	B	0	A	0.29039293	A	0.068431354	B	0.109452117	A	0.824691257	B	0.692499995		0.643897901	A												
rs10978127	9	9938303	0.019660137	-	C	T					0.21928759	B	0.691841847	B																					0.81783745	B																
rs10978127	9	9938303	0.019660137	-	C	T	0.083762319	B	0.019660137	A													0.264949695	B	0.550296465	B	0.974096024	A	0.595423876	A	0.06803	A	0.402086565	B	0.099809997	A	0.525920889	A	0.923238656	B	0.516819723	A			0.825500011		0.566403315	B												
rs10759117	9	9939431	0.002042952	+	A	T					0.196288058	B	0.977449534	A																					0.709582922	A																
rs10759117	9	9939431	0.002042952	+	A	T	0.595373718	B	0.440673208	B													0.794560686	B	0.343343909	A	0.002042952	A	0.842303264	A	0.544200003	B	0.871422362	B	0.048889998	A	0.77347663	A	0.705727503	A	0.834798541	A			0.067050003	B	0.392752866	B												
rs10978130	9	9941874	0.007217102	-	C	T					0.476296125	B	0.060217009	B																					0.858682959	B																
rs10978130	9	9941874	0.007217102	-	C	T	0.386658557	A	0.309565426	B					0.736177457	A	0.925637423	A	0.007217102	A	0.990394029	A	0.509000003	B	0.586415259	A	0.219300002	B	0.998225833	B	0.717502154	A	0.111005521				1		0.713818025	A												
rs10816263	9	9943127	0.393390179																																					0.500199974	G	0.781099975	G	0.997799993	A	0.768400013	G				TOP	(A/G)
rs2040084	9	9946850	0.131699994	+	C	G					0.919679244	A	0.808677387	A	0.393390179	A																																				
rs10978135	9	9947130	0.040759117	-	C	T	0.397124251	B	0.333658969	A									0.602556108	B	0.93154964	A			0.974853489	B	0.986599982	B	0.729301126	B	0.911099063	B	0.436094681				0.131699994		0.320268043	A												
rs7860466	9	9947301	0.040759117	+	G	T	0.095134544	B	0.040759117	A													0.304699987	B			0.084289998	B					0.096662712	A			0.1294		0.581462255	A												
rs12349928	9	9947866	0.145699993																																					0.749000013	A	0.586000025	A								0.316599995	C	Top	(A/C)
rs12347529	9	9949250	0.145699993	+	C	T	0.488083926	B	0.62144967	B																	0.631200016	A		B			0.998328103				0.145699993		0.680640178	A												
rs7851920	9	9950401	0.017156544	-	G	T									0.229528312	B	0.948991228	B	0.929333189	A	0.350755886	A			0.589197257	A			0.266284099	B	0.856058511	B																				
rs2382087	9	9950537	0.017156544	+	A	G	0.138451957	B	0.196474929	A	0.287263772	A	0.503417557	A					0.785634578	B	0.572767637	B	0.779500008	A	0.578581437	B	0.128999993	B	0.517285352	B	0.752689356	B	0.017156544		0.850551855	B	0.140000001		0.893929621	A	0.892499983

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase
rs7860014	9	9952204	0.013369965																							
rs7470838	9	9952381	0.013020278	+	A	G					0.013369965	A	0.023362872	B	0.682022832	A										
rs7470838	9	9952381	0.000661835	+	A	G	0.337415729	B	0.550516782	B	0.980180808	A	0.485525172	B	0.442958327	A	0.292439236	A	0.354298293	A	0.856773469	B	0.774500012	B	0.284371075	A
rs10491909	9	9952498	0.000661835	+	A	G					0.064184157	A	0.000661835	B	0.288909788	B										
rs10491909	9	9952498	0.000165423	+	A	G	0.837164212	B	0.268531799	A	0.172605405	A	0.204003199	B	0.382068084	B	0.769716131	B	0.738834835	A	0.85210283	A	0.107299998	A	0.025321333	B
rs12350467	9	9952603	0.000165423	-	A	G	0.000165423	B	0.151184994	A	0.38682923	B	0.696227171	A					0.012929021	B	0.512509638	A	0.912400007	B	0.20306771	B
rs10491908	9	9953879	0.072247882	-	A	G					0.625088257	B	0.723732309	A												
rs10491908	9	9953879	0.072247882	-	A	G	0.072247882	B	0.365162729	A									0.275403674	B	0.223185845	A	0.554199994	A	0.767242482	B
rs10491907	9	9953943	0.112899996	-	G	T					0.777173698	A	0.206293004	B												
rs9299105	9	9954268	0.286199987	-	C	T					0.923116092	B	0.779065251	B												
rs7873262	9	9955824	0.012737111																							
rs10115039	9	9956113	0.012737111	-	A	G	0.048109367	B	0.18045357	A	0.050401108	B	0.012737111	A					0.035009114	B	0.179908361	B	0.779500008	A	0.041619951	B
rs10739206	9	9958038	0.003015426																							
rs12339761	9	9958236	0.003015426	-	A	G	0.141846771	B	0.211108789	A	0.116503583	B	0.003015426	A					0.681016036	B	0.761756254	B	0.331099987	B	0.646632375	A
rs12352379	9	9958339	0.009346194	-	G	T	0.060850184	B	0.154790521	A	0.147789599	B	0.009346194	A					0.626790094	A	0.216557708	B	0.484100014	A	0.634223364	B
rs16930689	9	9958413	0		C	T					0.403147052	A	0.045724663	B												
rs16930689	9	9958413	0	-	C	T	0.318028825	A	0.105988262	B									0.50770279	B	0.726110531	A	0.405999988	A	0.465818247	A
rs2890896	9	9958773	0.001951875	+	C	G	0.480825817	B	0.622003236	A	0.339723587	A	0.411326897	A					0.644896563	A	0.019105167	B	0.932799995	A	0.972817817	A
rs4742645	9	9959023	0.001951875	+	C	G	0.382220892	B	0.464906979	A	0.796176208	B	0.026626099	A	0.720010473	B			0.559144963	B	0.001951875	B	0.598399997	B	0.797837434	A
rs7032996	9	9959896	0.007026154	-	A	G					0.100257524	A	0.833395483	B												
rs7033009	9	9959939	0.007026154	-	A	G	0.007026154	A	0.222163629	B	0.373321227	A	0.367269213	B	0.86163376	B	0.553331822	A	0.693462395	B	0.367938085	A	0.223800004	A	0.789057635	A
rs7860594	9	9959965	0.02737	-	C	G	0.849586202	A	0.156789172	A																
rs7860148	9	9960203	0.02737																							
rs7870686	9	9960533	0.035870001	-	C	T	0.165441355	B	0.3204507	A													0.826399982	B		
rs7870939	9	9960747	0.043930002																							
rs10114140	9	9961050	0.004668199																							
rs6477431	9	9962241	0.002410854	+	A	G	0.005220868	A	0.091682786	B	0.009864629	A	0.076891438	B					0.875428923	B	0.178388993	A	0.373899996	A	0.595169314	A
rs2382089	9	9962321	0.002410854	+	C	T	0.326859541	A	0.355397612	A					0.326474096	B	0.684841472	A	0.581224746	B	0.511421433	B	0.582899988	A	0.397198353	A
rs2890897	9	9963935	0.036352381	+	C	G					0.182753785	A	0.036352381	A	0.764403551	A										
rs2890897	9	9963935	0.051870779	+	C	G	0.700613538	A	0.737335546	A	0.742760651	B	0.054139078	A	0.835123077	B	0.375577327	A	0.051870779	B	0.226072669	B	0.74180011	B	0.692888909	A
rs2890898	9	9964221	0.013895256	-	C	T					0.896655487	B	0.062534824	B	0.617188641	A										
rs2890898	9	9964221	0.013895256	-	C	T	0.741157928	B	0.392855749	B	0.045847126	B	0.013895256	B	0.389713777	A	0.776227308	B	0.375575613	A	0.395186588	A	0.199399993	A	0.215035331	B
rs7873893	9	9964453	0.005510563	+	A	G					0.958811546	B	0.266697153	B												
rs7873893	9	9964453	0.005510563	+	A	G	0.591514697	B	0.817935831	A													0.248199999	B		
rs7858099	9	9964650	0.005510563	+	C	G					0.005510563	B	0.37665804	B	0.082472167	B										
rs7858099	9	9964650	0.006196801	+	C	G	0.105185611	B	0.844492502	B					0.023848245	B	0.404260667	B	0.928298333	B	0.922768982	A	0.434599996	A	0.754974512	A
rs2382090	9	9964811	0.020751327	+	A	G	0.997892846	A	0.581913256	A	0.664481335	B	0.182824399	A	0.020751327	A	0.823200268	A	0.697813807	B	0.167293811	A	0.283300012	B	0.829859909	A
rs2382092	9	9965058	0.052638642								0.42535145	A	0.069429358	A	0.052638642	A										
rs4742646	9	9965323	0.110580268	+	A	C					0.110580268	B	0.996505361	A												
rs4742646	9	9965323	0.172999993	+	A	C	0.845645452	A	0.787697597	A													0.358799994	B		
rs7874951	9	9968178	0.172999993																							
rs7874659	9	9968623	0.021101541	+	A	G	0.812770907	B	0.770821656	B													0.229599997	A		
rs10759118	9	9970977	0.021101541	+	A	G	0.383052344	A	0.406771594	A	0.705911562	A	0.021101541	A	0.027236351	A	0.086266143	B	0.790909166	B	0.76491603	B	0.41080001	B	0.989185616	B
rs7022969	9	9971005	0.315499991	+	A	C	0.439891294	A	0.510433128	A													0.315499991	B		
rs7040189	9	9974631	0.086181547																							
rs10739208	9	9975322	0.003337138	-	A	G	0.389068217	A	0.378575774	A	0.680470019	B	0.134902396	A	0.086181547	A	0.941199872	B	0.815348043	B	0.809190472	B	0.594500005	B	0.702232697	A
rs2000298	9	9975544	0.003337138	-	C	T	0.622711955	A	0.961078998	B													0.710900009	B		
rs10978151	9	9979624	0.004881249	+	C	T	0.07124059	A	0.021250315	B	0.998302315	B	0.407722055	B	0.195500692	A	0.717829538	A	0.307702135	A	0.880525706	B	0.04958	B	0.802224658	A
rs7031512	9	9982348	0.004881249	+	A	G	0.844892783	B	0.765799263	B													0.712100029	A		
rs7466206	9	9983029	0.198899999																							
rs7034077	9	9985482	0.006855545	+	A	T	0.553006514	A	0.915005377	A													0.457300007	A		
rs10759122	9	9985882	0.006855545	+	C	G	0.63158538	A	0.073177537	A	0.638092603	B	0.006855545	A	0.438510296	A	0.809015984	A	0.497234574	A	0.363089381	B	0.392199993	B	0.845903982	A
rs10816273	9	9985938	0.108599998																							
rs10978156	9	9990931	8.34426E-05																							
rs4425814	9	9993764	8.34426E-05	+	A	T	0.843537481	A	0.2635887	A	0.966204679	A	0.511292038	B	0.442610994	B	0.420002997	A	0.680799671	A	0.31060464	A	0.418199986	B	0.469519353	B
rs10816274	9	9994634	0.154799998																							
rs16930778	9	9995176	0.124799997																							
rs10978162	9	9996006	0.124799997																							
rs13283706	9	9998130	0.206699997																							
rs2382104	9	9998726	0.038125691																							
rs4305952	9	10001184	0.038125691	+	C	G	0.822225405	B	0.495757903	A	0.119427044	B	0.489082591	B	0.526905595	B	0.80361792	B	0.671436745	B	0.645132394	A	0.597899973	B	0.806801708	B
rs4497018	9	10001571	0.042563639																							
rs1343535	9	10004143	0.042563639	-	C	T					0.042563639	B	0.38108425	B	0.253515162	B										
rs1343535	9	10004143	0.000413462	-	C	T	0.751117752	A	0.331101978	A	0.539578014	A	0.228088804	B	0.213971083	B	0.684274816	A	0.35612074	B	0.374808824	A	0.258700013	B	0.804112457	B
rs10511529	9	10007687	0.000413462	+	C	G					0.000413462	B	0.574029163	B	0.375174521	B										
rs7867622	9	10007739	0.006059747								0.016503317	B	0.006059747	A	0.900302942	A										
rs4333667	9	10008121	0.363700002																							
rs16930828	9	10010251	0.00060001	+	A	G	0.602053561	B	0.672841588	A													0.363700002	B		
rs12001871	9	10010534	0	+	A	C	0.752144756	B	0.578378112	A	0.622463068	B	0.365888734	A					0.532628926	A	0.209208794	B			0.451334285	B
rs16930832	9	10013288	0	-	A	T	0.017820919	A	0.304156119	B	0.788416682	A	0.266220405	A					0.724609137	B	0.707734844	B	0.854499996	B	0.79509269	A
rs10839012	9	10013441	0	-	C	T	0.170220265	B	0.493804188	A													0.327199996	B		
rs16930836	9	10014528	0	-	A	G	0.541905398	A	0.2661275	B	0.845565456	A	0.671295977	B					0.21935138	B	0.325724929	A	0.178200007	B	0.086188565	A
rs727756	9	10015975	0.016017468	+	A	G	0.546204665	B	0.228913615	B	0.303493272	A	0.805685279	A	0.166484662	A	0.888696181	B	0.574345761	B	0.522766425	B	0.234300003	A	0.743068434	B
rs10733202	9	10017632	0.016017468	-	A	C	0.863469849	B	0.794405021	B													0.827099979	B		
rs1217008	9	10018178	0.054885733	+	A	T					0.38050571	B	0.636627906	B											0.613858796	B
rs1217007	9	10018397	0	+	C	T	0.835378652	B	0.499497117	A													0.701799989	A		
rs1583910	9	10018851	0	+	G	T	0.268958187	B	0.014657212	A	0.694959556	B	0.093150064	B					0.285361436	A	0.454731079	A	0.249699995	B	0.995712698	B
rs1217004	9	10019787	0.062899999	-	A	G	0.220700376	A	0.137573956	B													0.457300007	B		
rs1217003	9	10020458	0.000131059																							
rs1217002	9	10020824	0.000131059	-	A	G					0.372999423	B	0.000131059	A												
rs7041082	9	10025011	0.003109293	-	A	G					0.40963891	B	0.397774242	B												
rs10809018	9	10025658	0.003109293	-	A	G	0.069881912	A	0.140586222	B					0.838783316	B	0.330824805	B	0.459440948	A	0.793475396	B	0.997500002	A	0.228504235	B
rs10809019	9	10025975	0.005503673	+	A	T	0.233482204	B	0.79812738	A													0.788100004	B		
rs7848407	9	10027958	0.028621183	-	A	G	0.298800537	B	0.028621183	A													0.905399978	A		
rs1238877	9	10028041	0.05514349	-	A	C					0.544499066	B	0.803858714	A	0.58201042	B										
rs1238877	9	10028041	0.05514349	-	A	C	0.836848691	B	0.244458575	A													0.964999974	B		
rs1441410	9	10028322	0.138350909	-	C	G					0.234243565	A	0.138350909	A	0.236557706	A										
rs959973	9	10029127	0.076446049																							
rs12554898	9	10030345	0.076446049	-	A	G					0.747643588	A	0.076446049	B												
rs291270	9	10033674	0.02063																							
rs291267	9	10034092	0.01194																							
rs291266	9	10034857	0																							
rs291261	9	10037099	0	+	C	T	0.325683122	A	0.05779649	B	0.801643927	A	0.068649797	B					0.110377253	A	0.101065044	A	0.711199999	B	0.418886454	B
rs291260	9	10037170	0.225899994	-	A	G					0.821013815	A	0.416961358	A												
rs10958845	9	10037674	0.037769999																							
rs2136530	9	10037844	0.037769999																							
rs1995845	9	10040872	0.055440001																							
rs442100	9	10044740	0.055440001																							
rs447910	9	10044994	0.101608251																							
rs832234	9	10045437	0.061261139		A	T					0.907811542	A	0.808567747	A												
rs832234	9	10045437	0.061261139	-	A	T	0.361234334	B	0.368080557	A													0.658100009	B		
rs1396906	9	10046880	0.165600002																							
rs395795	9	10048305	0.162699997																							
rs399780	9	10051106	0.162699997																							
rs417403	9	10051712	0.026998314																							
rs440764	9	10051829	0.026998314	+	C	G					0.139864332	B	0.026998314	B	0.628626912	A										
rs446874	9	10051872	0.621599972																							

rs_id	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn	Strand	ACTG
rs7860014															0.888300002	T	0.485199988	T	0.195500001	T	0.307200015	T	0.843699992	C		Bot	(T/C)
rs7470838															0.759599984	A	0.842100024	G	0.750899971	A	0.528800011	A	0.67019999	G		Top	(A/G)
rs7470838	0.07965	A	0.812543321	A	0.896350698	A	0.013020278	A	0.816649765	A	0.479000002		0.460789422	B	0.759599984	A	0.842100024	G	0.750899971	A	0.528800011	A	0.67019999	G		Top	(A/G)
rs10491909															0.853699982	C	0.541199982	C	0.30430001	C	0.403100014	C				Bot	(T/C)
rs10491909	0.77700001	A	0.182027248	B	0.443403922	B	0.011254143	A	0.836696646	B	0.837499976		0.485348352	B	0.853699982	C	0.541199982	C	0.30430001	C	0.403100014	C				Bot	(T/C)
rs12350467	0.367599994	B	0.548200823	B	0.744016165	B	0.050397444	A	0.92078352	B	0.213100001		0.896410566	B	0.613099992	C	0.526199997	T	0.603900015	T	0.833100021	T	0.173099995	T		Bot	(T/C)
rs10491908															0.885500014	G	0.440100014	A	0.289499998	A	0.274399996	A	0.102399997	A		Bot	(T/C)
rs10491908	0.554199994	B	0.761193684	A	0.34170867	B	0.525564148	A			0.354600012		0.711442732	A	0.885500014	G	0.440100014	A	0.289499998	A	0.274399996	A	0.102399997	A		Bot	(T/C)
rs10491907															0.742900014	G	0.62529999	T	0.847000003	T	0.841600001	T	0.112899996	T		Top	(A/C)
rs9299105																											
rs7873262															0.666999996	C	0.50819999	C	0.286199987	C	0.627099991	C				Top	(A/G)
rs10115039	0.367599994	B	0.923268428	B	0.104626248	B	0.753856773	A	0.816120496	B	0.213599995		0.266172819	A													
rs10739206															0.97149998	C	0.559400022	C	0.311300001	C	0.502699971	C	0.914900005	C		Top	(A/G)
rs12339761	0.367599994	B	0.062890336	B	0.07735578	B	0.592492679		0.938119716	A	0.274599999		0.381473354	A													
rs12352379	0.367599994	B	0.525713002	B	0.021951291	B	0.899705269	A	0.816038362	B	0.213		0.42461266	A													
rs16930689									0.207848403	B																	
rs16930689	0	B	0.685812359	B	0.100142779	A	0.112523577				0.515100002		0.134091201	B													
rs2890896	0.864099979	B	0.298763502	B	0.683755636	B	0.033114158	A	0.627016249	B	0.719399989		0.346426995	A													
rs4742645	0.989300013	A	0.09758449	B	0.447639475	B	0.19034449	A	0.752348932	B	0.653400004		0.073961111	A													
rs7032996									0.875890277	A																	
rs7033009	0.2324	A	0.156199154	B	0.18061609	A	0.031538828	A	0.674774644	A	0.572499991		0.50746235	B													
rs7860594	0.77700001	B					0.670640151	A			1		0.428347366	B													
rs7860148															0.555199981	C	0.643100023	T	0.02737	T	0.098889999	T	0.351900011	T		Bot	(T/C)
rs7870686	0.035870001	B		B			0.110106741				0.525399983		0.766170165	A													
rs7870939															0.083640002	A	0.562399983	A	0.892199993	A	0.961600006	G	0.265700012	A		Bot	(T/C)
rs10114140															0.979700029	G	0.443899989	A	0.043930002	A	0.093719997	A				Bot	(T/C)
rs6477431	0.05046	A	0.06168356	B	0.004668199	A	0.975383791		0.967922508	B	0.539300025		0.710165806	B	0.913299978	A	0.516399998	G	0.101599999	G	0.132100001	G	0.477299988	G		Bot	(T/C)
rs2382089	0.361099988	B	0.52738886	B	0.191229991	B	0.002410854				0.402200013		0.970852364	B	0.318300009	C	0.511200011	C	0.557299972	C	0.354000002	C	0.362199992	C		Bot	(T/C)
rs2890897																											
rs2890897	0.095870003	B	0.684584081	B	0.195805798	B	0.504822562	A	0.679481196	B	0.477600008		0.559968138	B													
rs2890898															0.168300003	G	0.469300002	G	0.092100002	A	0.25940001	A				Top	(A/G)
rs2890898	0.912199974	A	0.13457358	B	0.635888547	A	0.220017106		0.82474586	A	0.119000003		0.522027516	A	0.168300003	G	0.469300002	G	0.092100002	A	0.25940001	A				Top	(A/G)
rs7873893									0.715316478	B																	
rs7873893	0.262300015	B					0.90786832	A			0.266600013		0.563648608	B													
rs7858099																											
rs7858099	0.798600018	B	0.312155278	B	0.22222168	B	0.006196801				0.300099999		0.488822017	A													
rs2382090	0.342799991	B	0.639276419	B	0.841421441	B	0.88227415	A	0.176202671	B	0.434500009		0.506286194	B													
rs2382092																											
rs4742646									0.618455212	B																	
rs4742646	0.435900003	B					0.974551249	A			0.435000002		0.51464845	B													
rs7874951															0.451499999	T	0.422699988	T	0.172999993	C	0.584699988	C	0.621100009	T		Bot	(T/C)
rs7874659	0.435900003	A		B			0.517569538				0.504999995		0.428200591	A													
rs10759118	0.862800002	B	0.57493787	B	0.070144021	B	0.045593324	A	0.174946911	B	0.311800003		0.883533004	B													
rs7022969	0.358900011	B		B			0.73119197				0.434500009		0.534604322	B													
rs7040189															0.464100003	G	0.477200002	G	0.6426	G	0.894800007	G	0.606599987	G		Bot	(T/G)
rs10739208	0.793500006	A	0.553712942	B	0.399990398	A	0.663603938		0.535164121	B	0.864700019		0.303461746	B													
rs2000298	0.560400009	A					0.003337138	A			0.338400006		0.453778935	B													
rs10978151	0.559199989	A	0.799214145	A	0.997781518	B	0.117803967	A	0.817179101	B	0.765799999		0.408302278	A													
rs7031512	0.211899996	B		B			0.004881249				0.305900008		0.690644382	B													
rs7466206															0.409099996	C	0.545899987	C	0.198899999	C	0.756099999	C				Top	(A/C)
rs7034077	0.218400002	A		B			0.962637138				0.673099995		0.294797874	A													
rs10759122	0.764400005	B	0.091634239	B	0.916460125	B	0.150777343		0.16285962	B	0.222499996		0.956271231	A													
rs10816273															0.576900005	C	0.661499977	C	0.246099994	A	0.108599998	A	0.316300005	A		Top	(A/C)
rs10978156															0.723399997	T	0.743700028	C	0.133900002	C	0.165000007	C	0.398499996	C		Bot	(T/C)
rs4425814	0.949400008	B	0.287086416	B	0.411319775	B	8.34426E-05		0.21145977	A	0.266200006		0.99695085	A													
rs10816274															0.641099989	A	0.154799998	A	0.416500002	A	0.66109997	A	0.769699991	A		Top	(A/C)
rs16930778																			0.562300026	C	0.973500013	T				Top	(A/G)
rs10978162															0.330300003	A	0.124799997	A	0.204899997	A	0.578000009	A				Top	(A/G)
rs13283706															0.56370002	C	0.206699997	C	0.273600012	C	0.917599976	A	0.292100012	C		Bot	(T/G)
rs2382104															0.713	T	0.563899994	T	0.498899996	G	0.802100003	G				Bot	(T/G)
rs4305952	0.986100018	A	0.51322974	B	0.664680911	B	0.038125691		0.343570834	A	0.266400009		0.96195778	A													
rs4497018															0.611699998	A	0.133499995	A	0.495400012	A	0.700800002	A	0.719099999	A		Top	(A/C)
rs1343535																											
rs1343535	0.450800002	A	0.587312321	A	0.715165764	B	0.955140873	A	0.629127723	A	0.419200003		0.92058704	A													
rs10511529																											
rs7867622																											
rs4333667															0.823199987	A	0.99150002	A					0.850700021	G		Bot	(T/C)
rs16930828	0.386400014	A		B			0.586277265				0.528599978		0.56657563	B													
rs12001871	0.066830002	B	0.819518283	B	0.00060001	B		A	0.722675708	A				A													
rs16930832	0	B	0.105528603	B	0.813089725	B	0.229203461		0.393489069	B	1		0.331909156	B													
rs10839012	0.516700029	B		B			0.986030617				0.916700006		0.694539977	A													
rs16930836	0	B	0.274580051	B	0.525626494	A	0.006794893		0.1088361	A	0.698000014		0.425575939	B													
rs727756	0.520900011	B	0.493646886	B	0.574646112	A	0.927572162		0.796437567	A	0.417400003		0.875127877	B	0.41929999	C	0.183599994	C	0.455199987	C	0.789200008	C	0.740400016	C		Top	(A/G)
rs10733202	0.870000005	A					0.016017468	A			0.434500009		0.965654375	B													
rs1217008			0.054885733	B	0.444990537	A			0.128692478	B																	
rs1217007	0.717899978	A		B			0.267864623				0.67869997		0.738954502	B													
rs1583910	0	A	0.840079011	B	0.517131165	B	0.153893366	A	0.273170746	A	1		0.398129306	A													
rs1217004	0.386599988	B					0.157889281	A			0.280099988		0.368493805	B													
rs1217003															0.427399993	C	0.062899999	C	0.939899981	C	0.927299976	T	0.406199992	C		Bot	(T/C)
rs1217002																											
rs7041082									0.80677228	B																	
rs10809018	0.333099991	B	0.520460482	B	0.252800422	A	0.003109293	A			0.214000002		0.161810864	B													
rs10809019	0.333099991	A		B			0.005503673				0.252099991		0.683926277	A													
rs7848407	0.937300026	B		B			0.075983844				0.189199999		0.927220647	B													
rs1238877																											
rs1238877	0.476799995	A		B			0.05514349				0.333099991		0.707852412	A													
rs1441410																											
rs959973																			0.329299986	G	0.

Supplementary Table S1. ***Continued.***

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmrStrand	ACTG
rs449090	9	10053345	0.016554456	-	C	T					0.784466046	A	0.87591464	B	0.740724426	A																																		
rs449090	9	10053345	0.008256049	-	C	T	0.564243715	B	0.016554456	B													0.579400003	A			0.397700012	B		B			0.029795497				0.639800012		0.774449008	B												
rs565315	9	10054950	0.008256049	-	A	G	0.74556791	A	0.191497403	B	0.642761734	B	0.090774515	B	0.517384726	B	0.876150167	B	0.053508339	B	0.917402506	A	0.449400008	A	0.807915108	A	0.471399993	A	0.720931496	B	0.833940834	B	0.008256049		0.556365743	B	0.746200025		0.762044792	B												
rs1848753	9	10055206	5.32446E-05	+	C	T	0.166742	A	0.826162721	B					0.077093939	A	0.680016715	B	0.034583929	A	0.767083364	A	0.30340001	A	0.813695829	B	0.435600313	A	0.215345036	A	0.249927533	B	0.113907387	A			0.182600007		0.922110401	B												
rs832241	9	10056100	0	-	A	G	0.821873032	B	0.205692322	A	0.16591408	B	0.054246563	A	0.520546392	A	0.719633718	A	0.683892478	A	0.76484798	A	0.591700018	B	0.921566386	B	0.471399993	B	0.704452786	B	0.261549579	A	5.32446E-05	A	0.560244773	A	0.499199987		0.789607021	A												
rs1693096 8	9	10056608	0	-	A	G	0.794960984	A	0.095028983	B													0.619700015	A			0	B									0.462928833	A			1		0.602844289	A			0.876999974	T	0.736400008	C			Bot	(T/C)
rs169730	9	10059331	0.00559203	+	C	G	0.168215553	A	0.391051462	A	0.526277899	A	0.079973996	A					0.810658316	B	0.355462566	B			0.9469599	A	0.62379998	A	0.482564899	B	0.536291908	A	0.00559203		0.933274592	A	0.234500006		0.749185711	A												
rs10958869	9	10065300	0	+	C	T	0.577971654	B	0.629682342	B													0.524600029	B			0.34920001	B		B			0.839031605				0.217600003		0.724833789	A												
rs7873264	9	10065721	0	-	A	C	0.229343798	A	0.153048679	B													0.651300013	B			0	B		B			0.089902581				1		0.110427355	B												
rs12000430	9	10066184	0.05678911																																						0.991999984	G	0.986000001	A	0.237499997	G	0.117899999	G			Bot	(T/C)
rs9298651	9	10066276	0.05678911	+	A	G					0.172056479	A	0.05678911	A	0.574112445	B																																		
rs9298651	9	10066276	0.063409999	+	A	G	0.700381901	A	0.984658651	A	0.153416125	A	0.101036785	B	0.266157276	B	0.394970299	A	0.47190132	B	0.864912557	A	0.58069998	A	0.76884091	B	0.103100002	A	0.488184145	B	0.724697782	B	0.105725868		0.701856434	B	0.5079		0.692081684	B												
rs10958872	9	10066316	1.30518E-05																																						0.063409999	G	0.195099995	G	0.494100004	A	0.932600021	G			Bot	(T/C)
rs16931010	9	10066478	1.30518E-05	+	C	G	0.970437278	A	0.350530647	A									0.79220193	B	0.356193059	A	0.877300024	B	0.066051993	B	0.871399999	B	0.104769483	B	0.869721966	B	1.30518E-05	A			0.301699996		0.479701667	B												
rs16931013	9	10066860	0.007600917	-	C	T	0.466709431	B	0.989274552	B	0.561485076	B	0.016311153	B					0.534443881	A	0.907396567	B			0.987451178	B	0.103100002	A	0.308474449	B	0.737428458	A	0.0467499		0.648849737	B	0.639800012		0.876576955	B												
rs16931018	9	10067049	0.007600917	+	A	G	0.440184576	B	0.769875415	A	0.603613206	A	0.02965738	B					0.712737388	A	0.368926611	B			0.347085965	A	0.103100002	A	0.462254646	B	0.927712716	A	0.007600917		0.755772545	A	0.639800012		0.965397789	A												
rs7039475	9	10067111	0.029362795	-	A	T	0.804986186	B	0.241817388	A	0.950581009	B	0.428280966	B	0.726477605	A	0.568243696	B	0.058938827	A	0.31045529	B	0.943899989	A	0.225751236	B	0.863200009	A	0.15746571	A	0.120231506	B	0.029362795	A	0.898208884	B	0.093630001		B	0.920449681	B												
rs7023147	9	10067180	0.087860003	-	G	T					0.837537829	A	0.582266187	B	0.588354798	A																									0.087860003	C	0.236900002	C	0.192900002	A	0.690299988	A	0.494500011	A	Bot	(T/G)
rs7023147	9	10067180	0.087860003	-	G	T	0.921191845	A	0.873085823	B					0.23843972	A	0.315002271	B	0.265067899	A	0.385461541	B	0.483500004	A	0.822355388	A	0.2324	A	0.156264479	A	0.26953052	B	0.137657684	A			0.222100005		0.436579888	B	0.087860003	C	0.236900002	C	0.192900002	A	0.690299988	A	0.494500011	A	Bot	(T/G)
rs10511530	9	10067307	0.087088916	-	C	T					0.752625792	B	0.767334153	A																																						
rs10511530	9	10067307	0.00084899	-	C	T					0.748426992	B	0.087088916	B																					0.68470861	A																
rs10511530	9	10067307	0.00084899	-	C	T	0.263668752	B	0.656138537	B													0.69630003	B			0.64319998	B		B			0.00084899				0.631699979		0.660836289	A												
rs10511531	9	10067962	0.054921437	-	C	T					0.49182996	B	0.841475595	B	0.160589946	A																																				
rs10511531	9	10067962	0.054921437	-	C	T	0.645710248	B	0.737230557	B	0.667948	B	0.886121764	B	0.672918044	A	0.286301936	A	0.054921437	B	0.117491529	A	0.2667	B	0.89335389	A	0.2324	B	0.6598895	B	0.384713662	A	0.203348965		0.628973838	A	0.260399997		0.814589935	A												
rs17618258	9	10069326	0.002996049	+	C	T	0.64330798	B	0.365443658	B													0.483999997	A			0.1602	B					0.072407399	A			0.474299997		0.980641762	A												
rs10511532	9	10069844	0	+	C	G					0.22532463	B	0.002996049	A	0.178220282	B																																				
rs10511532	9	10069844	0	+	C	G	0.018878717	A	0.90372945	B	0.308936931	B	0.747894313	A	0.391739189	B	0.91536936	B	0.209874392	B	0.067895673	A	0.042709999	A	0.671399613	A	0	B	0.743291324	B	0.291632502	A	0.009679553		0.717154351	B	1		0.895172286	A												
rs10958877	9	10069912	0	+	A	T	0.166899319	A	0.039539325	B	0.068176844	A	0.73592912	B	0.667613403	A	0.06573565	A	0.662606742	B	0.877136414	B	0.313899994	A	0.446141043	A	0	B	0.389159414	B	0.096459011	A	0.016733567		0.249590488	B	0.173299998		0.765179856	B												
rs16931027	9	10070325	0	+	G	T	0.302859004	A	0.629408181	B	0.842567188	B	0.63408868	A					0.264081691	A	0.458490373	A	0.577199996	B	0.402980788	A	0	B	0.22607471	B	0.244455381	A	0.214689583		0.307738349	A	1		0.915377718	B												
rs7044540	9	10070421	0.115699999		A	C					0.367637065	B	0.964051147	A																					0.322082802	B																
rs10116268	9	10071387	0.004183548																																						0.115699999	G	0.194999993	G	0.387199998	A	0.889800012	A			Top	(A/G)
rs10119035	9	10074927	0.004183548	-	A	C	0.128093509	B	0.132082362	B	0.778336963	A	0.527660578	B	0.316152488	B	0.786749129	A	0.215046432	B	0.561442151	B	0.769299984	A	0.914493231	A	0.735300005	B	0.251412863	B	0.522104177	A	0.004183548		0.578956524	B	0.176499993		0.719943233	A												
rs17680494	9	10075249	0.136436545	-	C	T	0.136436545	B	0.196382535	A																	0.871399999	B					0.503806088	A			0.441199988		0.695178177	B												
rs7021364	9	10075847	0.047809999																																										0.27669999	C	0.280400008	C			TOP	(A/G)
rs10809027	9	10077429	0.047809999																																						0.047809999	G	0.242200002	G	0.814800024	G	0.307599992	G	0.591199994	T	Top	(A/C)
rs291328	9	10077519	0.141055268																																						0.312999994	T	0.282700002	T	0.368400008	T	0.227300003	T	0.191200003	C	Bot	(T/C)
rs413553	9	10078517	0.141055268	+	C	T	0.141055268	B	0.223837972	B	0.516013999	A	0.605431691	B	0.610056722	A	0.939038883	B	0.415650737	B	0.496554227	B	0.762899995	B	0.271546371	A	0.359299988	B	0.906728532	A	0.389706205	A	0.331223587	A	0.149046033	B	0.92750001		0.575094071	A												
rs60569	9	10079647	0.004338673	+	C	T	0.65134244	A	0.250835454	A													0.392699987	A			0.359299988	A		B			0.721603055				0.926299989		0.644486139	B												
rs447925	9	10079748	0.004338673	-	A	C	0.144023128	A	0.09889354	B	0.385974693	A	0.509775943	A	0.004338673	A	0.777867426	B	0.1990161	A	0.550736078	B	0.152999997	B	0.395466465	A	0.343899995	B	0.693116435	A	0.210056646	A	0.005944401	A	0.286335365	B	0.099509999	B	0.446107419	B												
rs724231	9	10079848	0.166099995	-	C	T	0.726396039	B	0.487630758	B	0.832823162	A	0.861627058	A	0.730874796	B	0.54032423	A	0.479694318	B	0.859871639	B	0.29460001	B	0.91757284	A	0.330000013	B	0.204033743	B	0.926114488	A	0.166410845		0.571052007	A	0.166099995		0.178976687	A												
rs12551049	9	10079897	0.01746																																						0.444200009	T	0.362500012	T							0.291000009	C	Bot	(T/C)
rs16931047	9	10080434	0.003926982	+	A	G	0.136157779	B	0.799708383	B	0.138639717	B	0.588474372	B					0.028150512	A	0.158669506	A	0.01746	B	0.787803864	B	0.289200008	B	0.154785269	A	0.762843573	B	0.552624498	A	0.365654138	B	0.382600009		0.631926666	B												
rs438111	9	10080836	0.003926982	+	C	G	0.003926982	B	0.337364352	A					0.171705297	B	0.287926831	A	0.861721977	A	0.461023704	B	0.450300008	A	0.251349036	B	0.38440001	A	0.566386789	B	0.932631273	A	0.619855099				0.419999987		0.536955985	A												
rs364297	9	10081133	0.154254009																																						0.190799996	G	0.258599997	G	0.273600012	G	0.305599988	G	0.167899996	A	Bot	(T/C)
rs13287746	9	10085301	0.057945945	-	G	T	0.907772584	A	0.841351468	A													0.53640022	B			0.471599996	B		B			0.154254009				0.698000014		0.610236644	B												
rs424301	9	10088543	0.057945945	-	C	T	0.753623884	B	0.919968622	B					0.057945945	A	0.900943018	B	0.610350914	B	0.31105791	A	0.418000013	B	0.734524144	A	0.290699989	B	0.887790385	A	0.763017564	B	0.465426756	A			0.717800021		0.873379115	A												
rs424305	9	10088776	0.019332733	+	A	G					0.984114562	B	0.777945236	A																					0.291618565	A																
rs381343	9	10088863	0.019332733	+	C	G	0.019332733	A	0.144167969	B													0.702700019	A			0.344999999	B					0.031126764	A			0.327800006		0.743581522	B												
rs433922	9	10089327	0.105839777																																						0.560699999	A	0.922200024	A	0.154200003	G	0.248799995	G	0.515299976	A	Bot	(T/C)
rs409047	9	10089451	0.105839777								0.105839777	B	0.530620026	A	0.106134215	B																																				
rs452582	9	10089873	0.111699029	+	C	G					0.111699029	A	0.76492001	B	0.305712512	A																																				
rs436563	9	10090851	0.057993415	+	A	T					0.387564147	B	0.702458627	B	0.163198569	B																																				
rs436563	9	10090851	0.057993415	+	A	T	0.114964675	B	0.057993415	A													0.684800029	B			0.738399983	B		B			0.094453932				0.285899997		0.652398329	A												
rs452746	9	10090890	0.01544																																						0.2509	G	0.331099987	G	0.814800024	G	0.307599992	G			BOT	(T/C)
rs403114	9	10091169	0.01544																																						0.480699986	G	0.850600004	G	0.01544	A	0.109999999	A			Top	(A/G)
rs447770	9	10091315	0.009092415	+	A	G	0.202667527	B	0.412066484	A													0.140799999	A			0.343899995	A		B			0.080932685				0.259900004		0.682271174	A												
rs440834	9	10091415	0.009092415	-	G	T					0.026179753	A	0.009092415	B	0.112870792	A																									0.131099999	C	0.193299994	C	0.784699976	C	0.265100002	C	0.096950002	A	Top	(A/C)
rs16931082	9	10091635	0	+	A	T	0.165272516	B	0.559731869	A													0.873300016	B			0.102300003	A		B			0.450869967				0.639800012		0.986933527	B												
rs7856338	9	10091810	0	-	C	T	0.761268471	A	0.16888144	A													0.073409997	A			0	B		B			0.441799666				1		0.520104781	A												
rs424265	9	10092721	0.012582796	+	G	T	0.012582796	A	0.188250531	B													0.551699996	A			0.397100002	B		B			0.03821175	A			0.164399996		0.724578067	B												
rs439467	9	10092903	0.028354079	+	C	T	0.341664112	A	0.028354079	B													0.971099973	A			0.696699977	B					0.934472348	A			0.576499999		0.650136558	B	0.201800004	C	0.356000006	C	0.211199999	C	0.143600002	C	0.135000005	T	Bot	(T/C)
rs860563	9	10093302	0.024688969																																						0.184699997	G	0.307799995	G	0.998700023	T	0.352999985	G	0.055130001	T	Top	(A/C)
rs159226	9	10096632	0.01025	+	C	T	0.070343635	B	0.024688969	A													0.745999992	B			0.791700006	A					0.258432505	A			0.501800001		0.890285727	B												
rs12554847	9	10097399	1.58758E-06																																						0.5625	A	0.524399996	A	0.01025	G	0.098949999	G			BOT	(T/C)
rs2890901	9	10102766	1.58758E-06	+	C	T					0.120379702	A	1.59E-06	B	0.753624489	B																																				
rs2890901	9	10102766	0.187207121	+	C	T	0.341069714	A	0.62779832	B					0.834972078	B	0.187207121	B	0.753413975	B	0.739741304	A	0.197400004	A	0.766165389	B	0.9102	A	0.493698287	B	0.365406497	B	0.412746047				0.340799987		0.588544729	B												
rs9291294	9	10103409	0.060973908	+	C	G	0.661084389	A	0.23264053	B													0.923300028	B			0.637799978	B					0.32061881	A			0.569599986		0.661146127	B												
rs9291296	9	10103900	0.060973908	+	A	G					0.064848678	B	0.956476755	A	0.060973908	B																									0.674099982	G	0.780099988	A	0.087849997	G	0.122599997	G	0.187600002	A	Top	(A/G)
rs9291296	9	10103900	0.078842196	+	A	G					0.726631642	B	0.65749347	A																					0.222766927	A							0.674099982	G	0.780099988	A	0.087849997	G	0.122599997	G	0.187600002	A	Top	(A/G)
rs9291296	9	10103900	0.006838713	+	A	G	0.614970954	B	0.161831479	A													0.244599998	A			0.375499994	A		B			0.078842196				0.92839998		0.808665441	B	0.674099982	G	0.780099988	A	0.087849997	G	0.122599997	G	0.187600002	A	Top	(A/G)
rs12336411	9	10104307	0.006838713	+	C	G	0.007488152	A	0.852836339	A	0.734181262	B	0.480256782	A	0.134718534	B	0.433173107	A	0.636021591	A	0.006838713	A			0.523187853	B	0.566900015	B	0.930360556	B	0.809459683	B	0.566669732		0.19281106	B	0.264899999		0.823355594	A												
rs725261	9	10104943	0.04053																																						0.109700002	C	0.04053	C	0.234599993	T	0.806900024	T			Top	(A/G)
rs725262	9	10105338	0.079099998	+	A	C					0.902837959	A	0.935952503	A	0.47976057	B																									0.120499998	A	0.079099998	A	0.623000026	A	0.485199988	A	0.981299996	A	Bot	(T/G)
rs10511533	9	10105598	0.081524975	+	C	T	0.081524975	B	0.946306402	A													0.560899973	B			0.103100002	A		B			0.564188465				0.650600016		0.644779494	B												
rs10118866	9	10109157	0.040550001																																						0.43720001	G	0.4023	G	0.3468	T	0.398099989	T	0.93720001	T	Top	(A/C)
rs2382105	9	10109504	0.040550001																																						0.073700003	C	0.040550001	C	0.222499996	T	0.46450001	T			Top	(A/G)
rs10958889	9	10113735	0.05136																																						0.147599995	C	0.092739999	C	0.616999984	C	0.911300004	C	0.944100022	T	Top	(A/G)
rs10121937	9	10114571	0.05136	+	A	T	0.164842662	A	0.320868696	B					0.058090429	B	0.278565176	A	0.467101016	B	0.419358701	A	0.05136	B	0.308685812	A	0.608900011	B	0.525355305	B	0.954313959	A	0.214335339				0.361900002		0.660767043	B												
rs10958890	9	10114584	0.008957014	+	A	G	0.335810928	A	0.997239548	B					0.82226514	B	0.960397546	A	0.276796649	B	0.498028981	A	0.143199995	B	0.319257803	A	0.893899977	A	0.98564864	B	0.900692402	A	0.066788973				0.503000021		0.912243467	A												
rs10958891	9	10114871	0.003591088	+	G	T	0.638679182	B	0.740038997	A	0.674282352	B	0.711022481	B	0.486508675	B	0.476424039	B	0.538262782	B	0.498840573	B	0.202099994	A	0.488750075	B	0.852500022	A	0.404226892	A	0.530726202	B	0.258539118	A	0.008957014	A	0.280099988		0.914734907	B												
rs294868	9	10114920	0.003591088	-	A	G	0.003591088	B	0.089050475	A	0.03324005	B	0.45011495	A	0.069110117	B	0.49341994	A	0.89223125	B	0.558172697	A	0.436800003	B	0.167972622	B	0.266799986	A	0.534818813	B	0.410718399	B	0.042337225		0.363298631	A	0.070780002	A	0.725685186	B	0.426999986	C	0.758400023	C	0.860700011	C	0.436399996	C	0.275299996	T	Bot	(T/C)
rs10958892	9	10115118	0.090718737	+	C	T	0.133641724	B	0.617080358	A	0.414571932	B	0.117021498	A	0.987648295	A	0.213332909	A	0.820239496	B	0.366537101	A	0.102200002	B	0.745413544	A	0.852500022	B	0.680025822	B	0.806389864	B	0.958604132		0.567261756	B	0.336800009		0.977410303	B												
rs10958895	9	10115835	0.005356097	+	A	T	0.106555557	A	0.717677165	B	0.399665738	A	0.619192958	A	0.222652318	B	0.097275291	B	0.362463887	B	0.090718737	B	0.147200003	A	0.144855257	B	0.852500022	A	0.787078912	B	0.266851242	B	0.60544859	A	0.551491683	B	0.265300006		0.162479049	B												
rs159224	9	10116201	0.005356097	-	A	C	0.3600116	B	0.355717833	A	0.656344845	B	0.35334572	B	0.123030794	B	0.903464626	B	0.591372764	B	0.005356097	B	0.170900002	A	0.948944471	B	0.50059998	A	0.933004627	B	0.777634205	A	0.153546186	A	0.133297999	A	0.928600013		0.991652624	A												
rs10958896	9	10116895	0.028751348	+	A	T	0.831451595	B	0.971821902	B	0.775851496	B	0.801137717	A	0.762819148	A	0.528227367	A	0.24605026	A	0.234816918	A	0.325700015	B	0.254238459	A	0.886799991	B	0.656241206	B	0.939703065	A	0.028751348		0.381092061	A	0.414700002		0.07858829	A												
rs7043462	9	10117876	0.041338089	+	C	T	0.75734361	B	0.561563137	B													0.232099995	A			0.852500022	A		B			0.777017737				0.276499987		0.321739145	B	0.115199998	C	0.070119999	C	0.235699996	C	0.554199994	C	0.9727	T	Top	(A/G)
rs150409	9	10118645	0.018301987	+	C	T	0.90860785	B	0.419842911	A	0.914900512	A	0.66839508	B	0.060755418	B	0.478682332	B	0.889958529	A	0.041338089	B	0.238499999	A	0.370365825	A	0.801699996	A	0.846837986	B	0.658431116	A	0.528468538	A	0.18125138	A	0.928499997		0.931637131	B	0.763499975	T	0.803200007	C	0.156200007	T	0.082950003	T	0.258300006	C	Top	(A/G)
rs10958899	9	10118701	0.003711768	+	A	G	0.018301987	B	0.281577915	A	0.193170295	B	0.520567886	A	0.315661367	A	0.435039478	A	0.78582423	A	0.444867595	B	0.410699993	B	0.900562714	A	0.852500022	B	0.826640484	B	0.981968839	A	0.669218263	A	0.432186829	B	0.275400013		0.48268205	A												
rs291303	9	10118814	0.003711768	-	A	G	0.003711768	A	0.007504024	B													0.584699988	A			0.50120002	B		B			0.953209857				0.101599999		0.358549204	B												
rs291304	9	10120219	0.058230002																																						0.336800009	C	0.605499983	C	0.963400006	T	0.681400001	C	0.268400013	T	Top	(A/G)
rs10119277	9	10120546	0.058230002																																						0.093180001	T	0.08089	T	0.840499997	C	0.951799989	C	0.058230002	C	Bot	(T/C)
rs10958907	9	10121581	0.009091403	-	C	G	0.927788413	B	0.667500177	B	0.494758867	B	0.834677756	B	0.207351342	B	0.638809934	A	0.690295212	A	0.542198312	B	0.184699997	A	0.654271868	B	0.987699986	A	0.111611573	A	0.307671147	A	0.498133856	A	0.093862655	A	0.397899985		0.79575002	B												
rs12345015	9	10121974	0.009091403	-	C	G	0.046689892	B	0.90416373	A	0.578384535	B	0.213376781	A	0.365684789	A	0.756359057	B	0.120705315	A	0.009091403	B	0.057530001	A	0.282013657	A	0.608900011	A	0.317127224	A	0.766986616	B	0.100368626	A	0.266237552	A	0.209199995		0.487702987	A												
rs10958908	9	10122437	0.018074367																																						0.093180001	G	0.06205	G	0.064520001	G	0.265199989	G	0.053320002	A	Bot	(T/C)
rs1322159	9	10122696	0.018074367	+	A	C	0.735457913	A	0.306137626	A					0.970493436	A	0.338918031	A	0.630776882	A	0.018074367	A	0.625	B	0.953552626	B	0.765200019	A	0.099203346	B	0.317694142	B	0.032312306				0.324499995		0.566655326	A												
rs10121068	9	10122710	0.047589999	+	A	C	0.28619618	B	0.413009977	A					0.622403047	B	0.902593362	B	0.414784054	B	0.180044133	A	0.047589999	B	0.210315411	B	0.518999994	B	0.644140148	B	0.430090597	B	0.223392538				0.377200007		0.523124933	B												
rs10958909	9	10124671	0.118428791	+	A	C	0.510657118	B	0.683126581	B	0.933392151	A	0.502894459	A	0.471411706	A	0.118428791	A	0.415380019	A	0.153421296	B	0.215200007	B	0.765472459	A	0.987699986	B	0.881352227	B	0.165580646	B	0.409460091		0.132402686	B	0.397899985		0.75238644	A												
rs10958910	9	10124760	0.012556567	-	C	T					0.686640904	A	0.432052643	A																					0.729956037	B																
rs10958910	9	10124760	0.012556567	-	C	T	0.619571356	B	0.

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgjda_P	jgjda_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNIII_PVAL	CNIII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treuf_pval	Treuf_phase	Ilmn	Strand	ACTG
rs2119589	9	10135234	0.033617853	+	A	T	0.811120171	A	0.751272345	A	0.782573246	B	0.766913589	A	0.561892586	A	0.778593525	A	0.082881769	B	0.242073957	A	0.114100002	B	0.917874211	B	0.289000005	B	0.564186271	B	0.597245806	A	0.033617853	0.212285913	B	0.09516	A	0.688134028	B													TOP	(A/C)
rs9695959	9	10135779	0.002475114																																						0.997600019	T	0.882399976	G	0.635999978	G	0.936100006	T					Top	(A/G)
rs16931175	9	10136471	0.002475114	+	A	G	0.417814992	A	0.465777513	A													0.870599985	B			0.424499989	B			B		0.217635255				0.723699987		0.002475114	B	0.170399994	A	0.217700005	A	0.380600005	G	0.138999999	G	0.096869998	G	Bot	(T/C)
rs16931176	9	10136521	0.045666476	-	A	C	0.807478164	A	0.18090689	A													0.741900027	B			0.269600004	B			B		0.9816875 67				0.710300028		0.048412502	B												
rs16931178	9	10136704	0.007083148	+	C	G	0.6089022	B	0.046091191	B	0.939621571	B	0.250887875	B					0.844013587	B	0.225388202	A	0.484400004	A	0.193271656	A	0.936200023	B	0.504880347	B	0.80730297	B	0.045666476	A	0.793365057	B	1		0.874419043	B												
rs7862228	9	10136829	0.007083148	+	C	T	0.21124206	A	0.669563652	A													0.928900003	B			0.289200008	A			B		0.007083148				1		0.789603616	B												
rs7850213	9	10137116	0.004412593																																										0.414000005	A	0.9102	A			Top	(A/G)
rs4741012	9	10138146	0.004412593	-	A	C					0.469743328	B	0.004412593	B																											0.957099974	G	0.343499988	T							0.251599997	G	Bot	(T/G)
rs291289	9	10138779	0.021784736	+	C	T					0.178571034	A	0.348356586	A	0.666514597	B																									0.55430001	C	0.767799974	C	0.344000012	T	0.834100008	T	0.979399979	C	Top	(A/G)
rs291289	9	10138779	0.021784736	+	C	T	0.19244358	A	0.194319694	A					0.291834326	A	0.639821642	A	0.791451223	B	0.305304853	B	0.519800007	A	0.278137902	B	0.78676001	B	0.572105262	B	0.705550716	A	0.021784736				0.209900007		0.350532412	B	0.55430001	C	0.767799974	C	0.344000012	T	0.834100008	T	0.979399979	C	Top	(A/G)
rs12552905	9	10139069	0.382499993																																						0.904399991	A	0.382499993	G									BOT	(T/C)
rs13297654	9	10148866	0.395900011																																						0.465200007	T	0.699699998	T	0.395900011	C	0.406199992	C	0.694800019	T	Top	(A/G)
rs1304641	9	10152452	0.018706486																																						0.703100026	G	0.971400023	G	0.678699997	G	0.653599978	A			BOT	(T/C)
rs1407351	9	10156359	0.018706486	-	A	G	0.426309086	A	0.763719571	A													0.366100013	A			0.83069998	B			B		0.018706486				0.162499994		0.711638989	B												
rs13285270	9	10160008	0.05274	-	A	G					0.421976964	A	0.904284227	A																					0.2603255	A																
rs13285270	9	10160008	0.05274	-	A	G	0.104993222	B	0.533511818	A													0.138300002	A			0.277799994	A					0.825879408	A			0.05274	B	0.502393309	A												
rs10114268	9	10160101	0.140699998																																						0.936699987	C	0.510800004	T	0.897599995	C	0.523100019	T	0.306600004	C	Top	(A/G)
rs10958933	9	10160958	0.04559532	-	A	T	0.354355977	B	0.16005661	B													0.583500028	B			0.695800006	A					0.746626508	A			0.140699998		0.683053837	A												
rs10809034	9	10161341	0.04559532	-	A	G	0.334989898	A	0.209470808	A	0.72964604	A	0.6561433	B	0.554615649	A	0.645938594	B	0.313635209	B	0.04559532	A	1	A	0.707472457	A	0.556699991	B	0.71667811	B	0.884271852	A	0.32066457	0.412719975	B	0.237000004		0.647726543	B												
rs12352128	9	10162573	0.059659999																																						0.999300003	C	0.969399989	C	0.234400004	C	0.059659999	C	0.450300008	T	Top	(A/G)
rs10119783	9	10163689	0.271299988																																						0.503600001	G	0.675599992	G	0.455199987	A	0.271699995	A			Bot	(T/C)
rs1358889	9	10164668	0.271299988																																						0.5255	C	0.271299988	C	0.658800029	A	0.730400026	A	0.498600006	A	Top	(A/C)
rs16931219	9	10165169	0.084057651																																						0.593599975	T	0.869599998	T	0.723500013	T	0.703299999	C	0.683499992	C	Top	(A/G)
rs16931228	9	10166877	0.035993133	+	C	T					0.917451501	A	0.084057651	B																					0.475026969	B																
rs16931228	9	10166877	0.006664426	+	C	T	0.528989294	B	0.607104504	A																	0.562399983	A			B		0.035993133				0.322400004		0.730940576	A												
rs10117980	9	10168560	0.006664426	+	C	T	0.545074003	B	0.839387097	B													0.735599995	B			0.817600012	A					0.006664426	A			0.150600001		0.445754951	A	0.81309998	T	0.795000017	T	0.790700018	T	0.880400002	C	0.902700007	T	Top	(A/G)
rs10511534	9	10171329	0.059150274	-	C	T					0.905369602	A	0.807269199	A	0.103832555	B																									0.749000013	G	0.479000002	G	0.773199976	G	0.48089999	G	0.923300028	A	Bot	(T/C)
rs10511535	9	10171673	0.047027762	-	A	G					0.936796957	B	0.536410966	B	0.059150274	A																																				
rs10511535	9	10171673	0.003524214	-	A	G	0.106449961	A	0.124167396	B													0.171700001	A			0.816399992	B			B		0.047027762				0.796700001		0.468247108	A												
rs294847	9	10174481	0.003524214	+	A	C	0.727394566	B	0.378425951	B	0.074665261	B	0.864475649	B					0.425407813	A	0.812105193	A	0.813899994	A	0.942164539	B	0.89289999	B	0.465836129	A	0.054017077	B	0.003524214	A	0.795509325	A	1		0.950061919	A												
rs294848	9	10174746	0.001898152																																						0.981400013	T	0.815599978	T	0.483599991	T	0.498199999	T	0.471899986	C	Bot	(T/C)
rs294849	9	10175328	0.001898152	+	A	G	0.102153441	A	0.238040522	A	0.172890437	A	0.143476327	A					0.866368194	B	0.19802583	B	0.949999988	B	0.646679508	A	0.321399987	A	0.159023184	B	0.670243239	A	0.001898152	0.353181022	A	0.719299972		0.491368618	B												
rs294851	9	10175573	0.008050175	+	C	T					0.705567269	A	0.141895334	B					0.008050175	B	0.474743772	B			0.112590548	A			0.081525609	B	0.085217975	A		0.198967849	B																
rs294852	9	10175596	0.009552418	+	C	T	0.236829842	A	0.154236217	B	0.009552418	A	0.778258246	A	0.613223438	B	0.916845253	A	0.329768483	B	0.527859494	B	0.352800012	B	0.582728954	A	0.169499993	B	0.934303326	B	0.943319178	B	0.260362413	A	0.306236567	B	0.01321		0.300213418	B	0.045290001	C	0.07739	C	0.231399998	T	0.406399995	T			TOP	(A/G)
rs294853	9	10177456	0.142123481	-	A	T	0.879060794	A	0.533036254	A													0.988499999	A			0.365200013	A					0.45180528	A			0.401499987		0.309621781	A												
rs1322163	9	10177598	0.038992244	+	A	G					0.570865403	B	0.670213595	B																					0.142123481	A					0.3917	G	0.651300013	G	0.640200019	G	0.321200013	G	0.929700017	A	Bot	(T/C)
rs294854	9	10178245	0.030567969	+	C	T	0.503251205	A	0.192885992	B													0.234799996	A			0.745500028	B			B		0.181353882				1		0.038992244	B	0.324200004	C	0.559300005	C	0.543799996	T	0.33039999	T	0.82980001	T	Bot	(T/C)
rs10756007	9	10178496	0.030567969		A	T					0.030567969	B	0.31829124	B																					0.499871506	A																
rs10756007	9	10178496	6.80042E-05	+	A	T	0.596230557	A	0.844453274	B													0.831900001	B			0.615100026	A					0.875192716	A			0.576799989		0.085210112	A												
rs12554626	9	10179333	6.80042E-05	-	C	G	0.54087331	A	6.80042E-05	B																	0.292400003	B			B		0.85515714				1		0.569750617	A												
rs294856	9	10182290	0.409099996																																						0.708299995	C	0.575800002	A	0.675999999	C	0.942099989	C	0.971700013	C	Bot	(T/G)
rs294857	9	10182858	0.049691249																																						0.996299982	T	0.409099996	T	0.673699975	G	0.883400023	G	0.9824	G	Top	(A/C)
rs17620627	9	10183737	0.049691249	+	A	T	0.049691249	A	0.6123725	B													0.439700007	B			0.404799998	B			B		0.481080626				1		0.33251292	B												
rs294830	9	10186809	0.146799997																																						0.6505	C	0.295700014	C	0.167600006	T	0.146799997	T			BOT	(T/C)
rs294829	9	10187122	0.000367992																																						0.155499995	G	0.285899997	G	0.485399991	A	0.392199993	A	0.584599972	A	Bot	(T/C)
rs294815	9	10191885	0.000367992	+	C	G	0.659510433	A	0.754991348	A	0.987620326	B	0.574563196	A	0.667546179	A	0.118617609	A	0.889698914	B	0.175586004	B	0.601999998	A	0.427648377	B	0.100400001	B	0.079503413	A	0.284928917	B	0.000367992	A	0.865205325	A	0.491299987		0.585274969	A												
rs294814	9	10192765	0.027882557	+	A	G	0.88624994	A	0.487448552	B													0.280299991	B			0.572399974	B					0.027882557	A			0.685699999		0.171814568	A	0.524399996	G	0.860800028	A	0.539699972	A	0.229499996	A	0.720099986	G	Bot	(T/C)
rs410601	9	10194129	0.010540967																																						0.754000008	T	0.310000002	T	0.936200023	C	0.989099979	C	0.533399999	C	Bot	(T/C)
rs433355	9	10194158	0.010540967	+	C	G	0.307425795	B	0.272676757	A	0.092762778	B	0.178198352	B	0.896527603	A	0.010540967	B	0.528706362	A	0.51567427	A	0.804400027	B	0.770638533	A	0.100400001	A	0.74593329	B	0.34733482	A	0.526709937	0.569179022	B	0.274300009		0.45222113	B												
rs4741017	9	10194526	0.028638112	+	C	T	0.980427164	A	0.826175213	B									0.478473529	A	0.315964831	B	0.194900006	A	0.363143472	A	0.034309998	A	0.197926337	B	0.258514182	A	0.028638112				1		0.262742573	A												
rs1322133	9	10195835	0.111447965																																						0.309599996	G	0.456400007	G	0.334500015	G	0.334300011	G	0.759999991	A	Bot	(T/C)
rs10511536	9	10196451	0.111447965	-	G	T					0.168995404	B	0.787392173	A	0.111447965	B																																				
rs575932	9	10197930	0.161300004	+	C	G	0.735152464	B	0.448568588	B													0.54519999	A			0.271200001	B					0.332675028	A			0.161300004		0.876201033	A												
rs294798	9	10199786	0.294099987																																						0.599300027	A	0.839999974	A	0.401800007	G	0.294099987	G			Top	(A/G)
rs2498596	9	10201759	0.323399991																																						0.354000002	G	0.323399991	G	0.786800027	A	0.351200014	A	0.753600001	G	Bot	(T/C)
rs968953	9	10202591	0.002209																																						0.771799982	G	0.765900016	G	0.401100001	A	0.934099972	A	0.805400014	A	Top	(A/G)
rs2498598	9	10204007	0.002209	-	A	G	0.197324108	A	0.395979279	A					0.847502598	B	0.613755977	B	0.818808079	B	0.887335811	B	0.002209	B	0.261852297	A	0.369500011	A	0.122896085	B	0.703879177	B	0.249863536				0.592599988		0.60786354	B	0.974399984	T	0.782199979	C	0.915000022	C	0.577700019	T	0.901499987	T	Bot	(T/C)
rs2475324	9	10205130	0.248400003																																						0.720499992	C	0.717400014	C	0.556100011	C	0.721000016	T	0.728500009	C	Bot	(T/C)
rs1322135	9	10206328	0.024262603																																						0.248400003	A	0.317499995	A									TOP	(A/G)
rs2498599	9	10206836	0.024262603	-	C	G	0.428650275	B	0.170630602	B	0.499319743	B	0.949062181	B	0.504904109	A	0.135319221	A	0.280042784	B	0.858866767	B	0.164499998	A	0.81208084	A	0.161300004	B	0.674052136	A	0.640510148	B	0.024262603	A	0.740450024	B	0.899100006		0.690158341	A												
rs2498600	9	10206903	0.038325088	-	C	T	0.058049727	B	0.527679418	A	0.46867493	B	0.886721131	A	0.933045272	B	0.876413484	A	0.787750992	B	0.366478864	B	0.127200007	A	0.83683103	A	0.591000021	B	0.741641593	B	0.936151801	B	0.042795433	A	0.213868162	A	1		0.954615321	B												
rs2498601	9	10207017	0.038325088	+	C	T	0.648620899	B	0.188999828	A	0.313468495	B	0.827067925	B	0.769840044	B	0.393146775	B	0.110680612	A	0.655505494	A	0.069650002	B	0.672676692	A	0.591000021	A	0.916624515	B	0.387509063	A	0.038325088	0.298691699	B	0.780399978		0.520465442	A												
rs6474533	9	10207811	0.016711996																																										0.183200002	G	0.2359	G			Top	(A/G)
rs7025529	9	10208524	0.016711996	+	C	T					0.615167151	B	0.016711996	A	0.257093864	B																																				
rs7846730	9	10215500	0.047153388	+	A	G	0.531226316	B	0.488654611	B													0.770799995	A			0.776600003	B			B		0.047153388				0.243599996		0.227398132	B	0.430999994	C	0.116499998	C	0.753899992	T	0.109399997	T			Bot	(T/C)
rs1885431	9	10215533	0.106399998	+	C	T	0.722460139	A	0.526899072	A													0.857800007	A			0.778800011	B					0.379147026	A			0.71509999		0.245219022	A	0.416900009	C	0.106399998	C	0.424600005	T	0.110299997	T	0.8028	C	Top	(A/G)
rs1322136	9	10216620	0.035573123	+	A	C	0.210919353	B	0.608757178	B													0.485599995	A			0.467400014	B			B		0.452739904				0.785899997		0.173349496	A	0.820500016	A	0.577600002	A	0.903800011	C	0.491400003	C			BOT	(T/G)
rs16925550	9	10217095	0.035573123	+	A	G	0.035573123	A	0.917762374	B													0.522300005	A			0.261700004	A			B		0.287137352				0.272799999		0.537855182	B												
rs16925554	9	10217202	0.021164561	-	A	G	0.824280916	B	0.66177071	A													0.211300001	B			0.185699999	A			B		0.152389749				0.441199988		0.504996646	A												
rs10809037	9	10217464	0.021164561	-	A	G	0.851271625	A	0.165264323	A													0.774699986	B			0.682200015	A					0.021164561	A			0.209700003		0.141215291	A												
rs4143460	9	10218203	0.070830002	+	C	T	0.756508706	B	0.608308734	A													0.395799995	A			0.169499993	B					0.190727059	A			0.75910002		0.230023946	A	0.345800012	C	0.071259998	C	0.857599974	T	0.371100009	T			Top	(A/G)
rs1407913	9	10218955	0.070830002																																						0.46540001	C	0.070830002	C	0.842899978	T	0.226500005	T	0.942099989	T	Bot	(T/C)
rs10958962	9	10219902	0.320657554																																						0.815199971	C	0.896600008	C	0.703700006	T	0.698000014	T	0.874599993	C	Top	(A/G)
rs10809039	9	10220321	0.014753481	-	G	T					0.92634898	B	0.924137481	B																					0.320657554	B																
rs10809039	9	10220321	0.014753481	-	G	T	0.872973611	B	0.496894533	B					0.613636523	B	0.98101032	B	0.791482884	A	0.052535441	B	0.885299981	A	0.014753481	B	0.778800011	A	0.944128229	B	0.671485494	A	0.064989652				0.40959999		0.156785715	B												
rs1322137	9	10220744	0.305043149	-	A	C					0.89643153	B	0.305043149	B	0.651331195	B																									0.968599975	T	0.555599988	T	0.365700007	T	0.814499974	T	0.797399998	G	Top	(A/C)
rs10809041	9	10221178	0.089680001																																						0.513400018	G	0.192839998	A	0.700200021	A	0.989099979	G			Bot	(T/C)
rs7871439	9	10223188	0.089680001																																						0.089680001	G	0.329600006	G	0.622799993	A	0.449400008	A			Top	(A/G)
rs1322142	9	10223361	0.154799998																																						0.573499978	G	0.154799998	G	0.805499971	G	0.595399976	A	0.920099974	G	Bot	(T/C)
rs10809042	9	10224839	0.0967187																																						0.60799998	G	0.179100007	G	0.739499986	A	0.426899999	A			BOT	(T/C)
rs16925582	9	10226372	0.040354697	-	A	G	0.301860194	B	0.288619375	B	0.562036017	A	0.173039654	A	0.377997368	A	0.725329735	B	0.573812227	B	0.353222656	B	0.607500017	B	0.936893037	B	0.261700004	B	0.114902094	B	0.702894093	B	0.0967187	A	0.383473265	B	0.74970001		0.554109008	A												
rs2498604	9	10226440	0.040354697	-	C	T	0.12404683	B	0.165383901	A	0.263616277	A	0.872405905	A					0.062647461	B	0.365975695	B	0.602299988	B	0.238849666	B	0.041949999	B	0.608386324	B	0.503473034	B	0.040354697	A	0.815281175	A	0.350400001		0.596263614	A			0.494599998	A	0.442099989	A			Bot	(T/C)
rs10958969	9	10226629	0.079341729	-	C	T	0.307906669	A	0.290708835	A	0.173818675	A	0.12057393	A					0.84879368	B	0.41693515	A			0.729525024	B	0.69569999	B	0.656639037	B	0.339459474	B	0.079341729		0.289180834	A	0.194399998		0.368624584	B												
rs16925583	9	10226864	0.018929999	-	G	T					0.280497403	B	0.422382683	B																					0.492260385	A																
rs16925583	9	10226864	0.018929999	+	G	T	0.386469732	A	0.031315724	B													0.796500027	A			0.018929999	A			B		0.1382655				0.8391003		0.419430601	B												
rs17621850	9	10227302	0.038209626	-	A	G	0.451764901	B	0.361594023	B	0.232539253	A	0.857314126	A					0.990732398	B	0.534817872	B	0.313300014	B	0.439885361	A	0.522099972	B	0.815106904	B	0.652384423	A	0.26504018	0.806644368	B	0.402200013		0.648929946	A	0.983099997	T	0.960699976	C	0.222800002	C	0.324900001	C	0.503899992	T	Bot	(T/C)
rs10738156	9	10227682	0.038209626	-	A	C	0.415666117	A	0.074686749	B													0.581399977	A			0.525399983	B			B		0.038209626				0.281800002		0.563667011	B												
rs10217306	9	10228994	0.210999996																																						0.846899986	T	0.210999996	C	0.917999983	C	0.833000004	C			Bot	(T/C)
rs15702267	9	10230428	0.075730003																																						0.682299972	C	0.229100004	T	0.993300021	T	0.873899996	T	0.822399974	C	Top	(A/G)
rs13300585	9	10233703	0.02699																																						0.511500001	G	0.075730003	G	0.944400013	G	0.389600009	A			Bot	(T/C)
rs9298652	9	10236635	0.02699	+	C	T	0.550319983	A	0.325060997	B	0.961938865	B	0.325294739	B	0.154629249	A	0.261346435	A	0.563325478	B	0.629092395	A	0.769200027	B	0.768889589	B	0.766300023	B	0.125726683	B	0.415912418	B	0.346381464	0.109317991	B	0.02699		0.407323944	B												
rs4741020	9	10237217	3.81786E-07																																						0.789799988	C	0.175400004	C	0.655700028	T	0.307700008	T	0.624599993	T	Top	(A/G)
rs4741021	9	10237653	3.81786E-07	-	A	G					0.583228026	B	3.82E-07	A	0.062855293	A																																				
rs10958971	9	10239208	0.072096027	-	C	T					0.072096027	B	0.128621544	B																					0.478586848	B																
rs1322147	9	10241430	0.119303987	+	A	T	0.627421267	B	0.191641695	A	0.527974541	B	0.557239197	A	0.294713562	B	0.745701171	A	0.416054927	A	0.622782988	B	0.552900016	A	0.659311072	A	0.637000024	A	0.470454487	A	0.430204486	B	0.176363681	A	0.583592289	A	0.119999997		0.668553924	B												
rs1322148	9	10241492	0.119303987	-	A	T	0.336080631	B	0.670049658	A	0.224580597	B	0.640333875	B	0.670303711	B	0.82115356	A	0.744897887	B	0.119303987	B	0.98299998	B	0.917387911	B	0.487899989	A	0.128176966	A	0.754211633	B	0.321036661	A	0.934699468	A	0.843999982		0.988182931	B												
rs2498609	9	10241878	0.103353336																																						0.924000025	T	0.277799994	G	0.788999975	G	0.828499973	T			Top	(A/C)
rs4143458	9	10243852	0.103353336	-	C	T	0.264147928	B	0.535062786	A	0.436391527	B	0.488482025	B	0.716315223	B	0.82978643	B	0.273109659	B	0.21737278	B	0.72149998	B	0.650578175	B	0.564000011	A	0.901199819	A	0.588967722	B	0.103353336	A	0.562341353	A	1		0.856953197	A												
rs4741024	9	10244449	0.117700003																																						0.762799978	C	0.1219	C	0.997900009	T	0.495000005	T	0.727999985	T	Top	(A/G)
rs10756018	9	10244569	0.115824769																																						0.765900016	G	0.117700003	G	0.954299986	G	0.720899999	T	0.7579	T	Top	(A/C)
rs2498611	9	10244793	0.115824769	+	G	T	0.604006787	A	0.753836684	A													0.438499987	A			0.688300014	B			B		0.115824769				0.137799993		0.421316869	B	0.851100028	G	0.297500014	T	0.742200017	G	0.638599992	G			Top	(A/C)
rs2498612	9	10244968	0.06504	-	C	G	0.78049403	A	0.513673841	B	0.878377864	B	0.354433726	B	0.193309628	A	0.952166094	A	0.240532311	B	0.454695948	A	0.4384	B	0.140055565	A	0.853500009	B	0.27121998	B	0.687526009	A	0.7543337737	0.648125076	B	0.188899994		0.822610251	B												
rs2475327	9	10245320	0.024040001	-	C	G	0.580850443	A	0.389145725	A													0.27610001	A			0.784399986	B			B		0.371400412		0.06504	A	0.081197817	B												
rs2498615	9	10245370	0.024040001	-	C	T	0.171679673	A	0.246479088	B													0.394800007	B			0.383100003	B					0.281225055	A			0.024040001		0.550974211	B												
rs1322

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgjda_P	jgjda_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_Treut_pval	Treut_phase	IlmnStrand	ACTG
rs2475334	9	10249861	0.308899999																																					0.78460002	T	0.377900004	C	0.699999988	T	0.734200001	C	Top	(A/G)
rs2475335	9	10250263	0.003424868																																					0.55339998	T	0.308899999	T	0.541899979	C	0.474000007	C	0.705500007	C	Bot	(T/C)
rs2498625	9	10251785	0.003424868	+	A	G	0.007317931	A	0.881559939	B	0.094668889	A	0.809591444	B					0.667339043	A	0.367773542	A	0.465600014	A	0.089437011	A	0.688300014	B	0.003424868	B	0.370531798	A	0.052952808		0.270854915	A	0.137600005		0.795622752	B											
rs2475339	9	10252484	0.034299936	+	C	T	0.726591315	A	0.229438057	B	0.246047656	B	0.108558319	B	0.034299936	A	0.946361208	A	0.108518265	A	0.318994642	A	0.562399983	B	0.774074149	B	0.761900008	A	0.766577677	B	0.489710879	A	0.065788058		0.481929728	B	0.282900006		0.214466246	A											
rs2382199	9	10253181	0.141399995	+	A	G	0.63482214	A	0.970833711	A	0.540545098	B	0.886131917	A	0.173429921	B	0.17591482	B	0.782032246	A	0.501421343	B	0.573000014	B	0.764354471	A	0.774900019	A	0.910580117	B	0.831881825	A	0.571712399	A	0.179339174	A	0.141399995		0.721961131	A											
rs13285525	9	10255282	0.648500025																																					0.931900024	T	0.926100016	T	0.824500024	T	0.648500025	T	0.894299984	T	Bot	(T/G)
rs12164236	9	10256820	0.199399993																																										0.915499985	C	0.694199979	C			Bot	(T/C)
rs2475354	9	10258794	0.08715																																					0.705200017	G	0.199399993	G	0.333799988	G	0.862999976	G	0.796400011	G	Top	(A/C)
rs2475357	9	10260339	0.08715	-	A	C	0.318776304	A	0.750743462	B					0.650204322	A	0.300924152	B	0.712481045	A	0.116142787	A	0.802200019	B	0.18120052	A	0.942600012	A	0.839915599	B	0.577821285	A	0.224849159				1		0.162537637	B	0.562399983	G	0.08715	G	0.898000002	G	0.497500002	T			Top	(A/C)
rs1322155	9	10260636	0.026200469	+	A	G	0.514158511	A	0.834852821	B													0.672299981	B			0.83890003	A			B		0.338413654				1		0.501979209	B	0.599799991	G	0.132599995	G	0.713500023	G	0.541800022	A	0.872399986	A	Top	(A/G)
rs10809051	9	10262415	0.026200469	-	C	T	0.227511568	A	0.026200469	B	0.086767105	A	0.236131124	A	0.971670308	B	0.293679501	B	0.619673835	B	0.717313477	A			0.698634155	A	0.124700002	B	0.879234087	A	0.482649486	B	0.272817375	A	0.085477607	B	0.216999993		0.596505269	B											
rs10809052	9	10262669	0.059304291	+	C	G					0.077186716	A	0.579237015	A																					0.597181762	A															
rs1951786	9	10262695	0.059304291	-	C	T					0.059304291	B	0.26980435	B																					0.813687459	B															
rs7861410	9	10263253	0.142700002																																					0.790300012	A	0.142700002	A	0.638300002	C	0.291099995	C	0.973200023	C	Bot	(T/G)
rs7848469	9	10263864	0.72329998																																					0.818400025	T	0.931100011	G	0.972000003	G	0.935699999	G	0.72329998	G	Bot	(T/G)
rs7851534	9	10264023	0.184200004																																					0.815400004	T	0.981000006	T	0.766499996	G	0.828599989	G			BOT	(T/G)
rs7865468	9	10264080	0.184200004																																					0.972599983	A	0.184200004	A	0.608299971	G	0.298700005	G			BOT	(T/C)
rs10958998	9	10265798	0.00223581																																					0.693799973	G	0.755500019	A	0.724799991	A	0.958700001	A	0.622099996	A	Bot	(T/C)
rs1359096	9	10265924	0.00223581	-	A	G	0.551001924	B	0.922046685	A	0.173704207	A	0.699140674	A	0.074529778	B	0.965818047	B	0.688779793	B	0.00223581	B	0.763899982	A	0.253660818	A	0.69630003	A	0.410291652	A	0.831582479	B	0.020948771	A	0.161732763	A	0.367399991		0.703914112	B											
rs1359095	9	10266100	0.005457184	-	A	G	0.572666046	A	0.990162184	B	0.190284598	B	0.767336407	A	0.31163235	A	0.976232066	A	0.684883422	A	0.005457184	A	0.81099999	B	0.3303288334	B	0.900099993	B	0.654357038	B	0.583384615	A	0.163709802		0.096232596	B	0.368200004		0.94350904	A	0.533699989	G	0.189700007	G	0.728500009	A	0.325100005	A	0.564000011	A	Bot	(T/C)
rs10958999	9	10266736	0.012992164	-	C	G	0.022384454	A	0.14546307	B	0.447243538	A	0.320827297	A					0.251511809	B	0.963633713	B	0.483999997	B	0.567157867	A	0.518999994	B	0.012992164	B	0.479749793	A	0.108383073		0.714828345	B	1		0.654708742	A											
rs10959002	9	10267054	0.227899998																																					0.229499996	C	0.565299988	C	0.554199994	C	0.602400005	T	0.311800003	T	Top	(A/G)
rs10959007	9	10267319	0.227899998																																					0.227899998	C	0.377400011	C	0.59859997	C	0.954599977	A			TOP	(A/C)
rs16925679	9	10267602	0.066339999																																					0.601999998	C	0.713	C	0.353399992	C	0.575900018	C	0.317999989	C	Top	(A/G)
rs10959011	9	10268530	0.008241744	+	A	T	0.875337061	B	0.453548744	B													0.066339999	B			0.924000025	B			B		0.55654138				0.109099999		0.741351368	B											
rs10733205	9	10268701	0.008241744	+	C	T	0.812644762	B	0.151020993	B	0.061580106	A	0.253672726	B	0.292602969	A	0.008241744	B	0.45519562	B	0.124509371	A	0.422600001	A	0.431464386	A	0.998300016	A	0.587562976	A	0.779401801	B	0.090323013	A	0.957739127	A	0.188899994		0.810999147	B											
rs10738159	9	10268722	0.003981567																																					0.544700027	A	0.248099998	A	0.030540001	G	0.02268	G			TOP	(A/G)
rs1544056	9	10269606	0.003981567	+	A	C	0.643190723	B	0.634149887	B	0.945559835	B	0.191244986	B	0.89618648	B	0.416275773	A	0.754519497	A	0.572983546	B	0.59799999	B	0.55873947	B	0.778800011	A	0.016879232	A	0.708735198	B	0.003981567	A	0.588171647	B	1		0.204715015	B	0.930299997	G	0.088179998	G	0.113700002	G	0.120899998	G	0.364100009	T	Top	(A/C)
rs12236566	9	10269774	0.137500003																																					0.184900001	G	0.137500003	G	0.224199995	G	0.606599987	G	0.809800029	G	Bot	(T/G)
rs10511538	9	10271062	0.125876844	-	G	T					0.226657142	A	0.471993177	B																										0.439399988	C	0.458400011	A	0.300399989	A	0.67809999	A	0.554099977	C	Bot	(T/G)
rs10511539	9	10271703	0.125876844	-	A	G					0.872332555	B	0.788388952	A	0.125876844	B																																				
rs10959013	9	10272750	0.124399997																																					0.268099994	A	0.52609998	A	0.340900004	G	0.200299993	G	0.206799999	A	Bot	(T/C)
rs10959016	9	10273451	0.02575																																					0.808200002	A	0.39410001	G	0.156100005	G	0.124399997	G	0.243699998	A	Bot	(T/C)
rs10959018	9	10274628	0.02575	-	A	C	0.143920169	B	0.681730429	A													0.349500001	A			0.280400008	A			B		0.233617426				0.02575		0.397624523	A	0.268099994	G	0.474999994	G	0.405000001	G	0.872300029	G			Top	(A/C)
rs12005579	9	10274969	0.070500001	-	C	T	0.506481305	B	0.697072175	A													0.291799992	B			0.070500001	A					0.088991026	A			0.54339999		0.378586255	A					0.548500001	A	0.443599999	A			Top	(A/G)
rs10959022	9	10275593	0.119752367	-	A	G	0.510904131	B	0.687390545	A													0.308999986	B			0.5704	B			B		0.229865698				0.490099996		0.802871245	A											
rs16925703	9	10276018	0.031884248		C	T					0.423604259	A	0.119752367	A																					0.588193075	A															
rs12344926	9	10276986	0.031884248	+	A	G	0.544900396	B	0.973975604	B	0.977844183	A	0.387535417	B	0.859259903	B	0.212728298	A	0.083812163	A	0.263068436	B	0.788299978	B	0.775556667	B	0.475400001	A	0.689072662	A	0.285850372	A	0.031884248	A	0.123133158	A	0.916400015		0.432153411	B											
rs12345809	9	10277013	0.059530001	+	C	G	0.334376794	A	0.812137432	A													0.628099978	A			0.608900011	B					0.093985962	A			0.719399989		0.460766343	B											
rs10809060	9	10277258	0.000556087																																					0.636300027	A	0.125400007	A	0.059530001	A	0.35589999	A			Top	(A/C)
rs16925713	9	10277340	0.000556087	-	C	T	0.560121438	B	0.018328017	A																	0.605199993	B					0.000556087	A			0.815400004		0.672443678	A											
rs16925716	9	10277519	0.037510211	+	A	G	0.178315028	B	0.629212838	B													0.641099989	B			0.211799994	B			B		0.037510211				0.583100021		0.753136804	B											
rs1323499	9	10277901	0.033050001																																					0.717700005	G	0.226799995	G	0.05226	G	0.174500004	G			Bot	(T/C)
rs942158	9	10278571	0.033050001																																					0.945100009	C	0.222100005	C	0.033050001	C	0.115400001	C			Top	(A/G)
rs10511540	9	10279104	0.055399999	+	C	T					0.820248619	B	0.634828399	A	0.772201178	B																																				
rs10511540	9	10279104	0.055399999	+	C	T	0.060507144	B	0.446086416	A													0.138899997	A			0.660399973	A					0.080535647	A			0.055399999	B	0.517371464	A											
rs16925729	9	10279874	0.147236	+	A	G	0.157307101	B	0.750582494	B	0.251509725	B	0.321218627	A	0.811835168	A	0.792323149	B	0.635674999	B	0.214687387	A	0.259499997	A	0.176036925	B	0.867200017	A	0.454577951	A	0.831409151	A	0.694486246	A	0.147236	B	0.148900002		0.78892495	B											
rs880634	9	10280056	0.21261793	+	C	T					0.580024018	A	0.894356834	B																					0.650844836	B															
rs880634	9	10280056	0.008432161	+	C	T	0.879675983	A	0.639665704	B													0.700699985	B			0.503899992	B			B		0.121261793				0.913900018		0.734517961	A											
rs1323497	9	10280234	0.008432161	-	C	T	0.008432161	A	0.939154174	A	0.090121255	A	0.926293066	A	0.171529833	A	0.517756246	B	0.590591386	B	0.95508728	B	0.515299976	B	0.102901986	A	0.867200017	B	0.057686339	B	0.671810845	A	0.405252204		0.212709901	A	0.148900002		0.833223636	B											
rs12345631	9	10308435	0.035980001																																					0.857900024	C	0.528199971	C	0.393999994	T	0.378800005	T			BOT	(T/C)
rs587791	9	10308490	0.035980001																																					0.479600012	G	0.035980001	G	0.230299994	G	0.451799989	G	0.353399992	T	Top	(A/C)
rs12003120	9	10308512	0																																										0.724600017	T	0.439200014	T			Top	(A/G)
rs16925807	9	10308849	0	+	C	G	0.86409626	B	0.851012472	B	0.863205819	B	0.177789665	A					0.027857038	A	0.317889969	A	0.862399995	A	0.027770914	B	0	A	0.083804875	A	0.715277054	A	0.054555468	A	0.404726223	B	1		0.198488646	B											
rs7028343	9	10309293	0	-	C	T	0.987132852	B	0.279627348	B													0.627399981	B			0	A					0.851093503	A			1		0.980941641	A											
rs10511543	9	10309468	0.014418787	+	C	G					0.016495985	B	0.396645347	A	0.470239168	A																																				
rs10511543	9	10309468	0.014418787	+	C	G	0.476780648	A	0.61894317	A																	0.261700004	A			B		0.014418787				0.472499996		0.808562575	B											
rs10511544	9	10309881	0.027264341	-	G	T					0.783425092	B	0.275053798	A	0.219433751	A																																				
rs9657580	9	10312721	0.027264341	+	C	T	0.027264341	B	0.210600883	B													0.946099997	A			0.342999995	A					0.164881758	A			0.223199993		0.583891892	B											
rs12000988	9	10313818	0.016488567																																										0.968699992	G	0.511300027	G			TOP	(A/C)
rs9987798	9	10315044	0.016488567	-	A	G	0.343775311	A	0.397713502	A	0.731578662	B	0.270786579	A	0.542309461	A	0.016488567	B	0.615588194	B	0.578276251	B	0.912199974	B	0.912992306	B	0.342999995	B	0.916717936	B	0.239025545	B	0.501278989		0.684346304	A	0.159700006		0.813627616	A											
rs10809068	9	10319917	0.03647	+	A	T	0.641392533	A	0.32534617	A	0.690118245	B	0.131097432	A	0.162942539	B	0.167787881	B	0.662126572	B	0.697039553	A	0.453999996	B	0.578629	B	0.067489997	B	0.658466554	B	0.099539419	B	0.955584571		0.652898879	A	0.214499995		0.275754898	A											
rs10959051	9	10320850	0.03647																																					0.247899994	A	0.03647	A	0.191100001	A	0.349599987	A	0.903800011	A	Bot	(T/C)
rs1959053	9	10323382	0.02554																																					0.593900025	G	0.147300005	G	0.341800004	G	0.839900017	G	0.725700021	G	Top	(A/G)
rs10114902	9	10326364	0.02554																																					0.371100009	T	0.02554	T	0.91079998	T	0.84890002	C	0.690500021	T	Top	(A/G)
rs10756027	9	10328320	0.040690001																																					0.509599984	C	0.040690001	C	0.405000001	C	0.629800022	C	0.818499982	C	Bot	(T/C)
rs12551193	9	10331449	0.05071																																					0.53670001	T	0.538600028	T	0.710799992	C	0.572799981	C	0.388599992	T	Top	(A/G)
rs10809071	9	10331540	0.009386628																																					0.503199995	C	0.05071	C	0.362899989	C	0.633000016	C	0.649800003	C	Top	(A/G)
rs12552756	9	10332841	0.009386628	+	A	C									0.6857673	A	0.056538878	B	0.009386628	B	0.863202927	A			0.3948441	B			0.487527534	B	0.485699461	B									0.746500015	C	0.121699996	A	0.852900028	C	0.389499992	C	0.77759999	C	Top	(A/C)
rs7045309	9	10332853	0.062142744	+	A	T	0.663803098	B	0.942382752	A					0.140200224	B	0.062142744	A	0.292799778	B	0.974122816	B	0.967700005	B	0.540974941	A	0.8046	A	0.645891321	B	0.919458966	A	0.757893634				0.396600008		0.44734827	B											
rs7045637	9	10336358	0.131699994																																					0.390300006	A	0.131699994	A	0.996599972	A	0.583899975	G	0.362800002	A	Top	(A/G)
rs10959061	9	10336862	0.198303972	-	C	T	0.626414604	B	0.975095322	A													0.917100012	B			0.266600013	A			B		0.198303972				0.843100011		0.207128188	A											
rs10959062	9	10338091	0.240899995																																					0.625100017	T	0.590300024	T	0.371699989	C	0.696099997	C	0.354600012	T	Bot	(T/C)
rs7852334	9	10338659	0																																					0.647599995	G	0.240899995	G	0.951200008	A	0.994099975	G			Top	(A/G)
rs7852233	9	10338710	0	+	C	T	0.115525585	B	0.015296569	A	0.729020786	A	0.74726182	A					0.017516964	B	0.20629969	B	0.862699986	B	0.461397116	B	0	A	0.549837663	B	0.93640134	A	0.242133136	A	0.934859015	B	1		0.64148336	A											
rs12345788	9	10338933	0.026948128	-	A	C	0.175394002	B	0.92390311	A	0.810892767	B	0.964570597	A	0.755283055	A	0.81201443	A	0.426334156	A	0.551150889	A	0.2324	B	0.294850068	A	0.435900003	A	0.386048922	B	0.218748894	A	0.051415395		0.153871336	A	0.187399998		0.082176358	B											
rs10511545	9	10341048	0.005821786	+	C	T					0.650905377	A	0.026948128	B	0.309216887	A																																				
rs1323492	9	10341898	0.005821786	-	C	T	0.103916457	B	0.843035447	B													0.206699997	B			0.234699994	A			B		0.005821786				0.314599991		0.272620171	B											
rs1323491	9	10341990	0.471899986																																					0.541700006	G	0.471899986	G	0.848200023	G	0.567300022	A	0.65960002	A	Bot	(T/C)
rs10118105	9	10344455	0.186299995																																					0.907800019	A	0.560000002	G	0.673900008	A	0.642199993	A	0.975600004	A	Bot	(T/C)
rs16925863	9	10344770	0.102589624																																					0.495200008	T	0.186299995	T	0.719799995	T	0.747200012	T			Top	(A/G)
rs9298655	9	10345194	0.094800003	+	A	G	0.988293047	B	0.559640973	B													0.426400006	A			0.669499993	B					0.102589624	A			0.288700014		0.253874551	A											
rs10959066	9	10346340	0.094800003																																					0.789900005	C	0.509899974	T	0.419	C	0.094800003	C			Bot	(T/C)
rs9298656	9	10347348	0.418199986																																					0.718299985	A	0.418199986	A	0.420300007	A	0.639299989	G	0.975099981	A	Top	(A/G)
rs10756029	9	10348672	0.202099994																																					0.787599981	C	0.56099999	C	0.467200011	T	0.781400025	T			Bot	(T/C)
rs10959075	9	10352221	0																																					0.888300002	A	0.897400022	A	0.787599981	C	0.202099994	C			BOT	(T/G)

Continued on next page

Supplementary Table S1. *Continued.*

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgida_P	jgida_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn	Strand	ACTG
rs12005622	9	10353825	0	+	C	T	0.090782893	B	0.539504658	A													0.305999994	A			0	B		B			0.670272841				0.214100003		0.228997727	B												
rs7033338	9	10354655	0.109099999																																						0.412200004	C	0.796700001	C	0.704100013	C	0.277099997	C	0.886399984	C	Bot	(T/C)
rs12004522	9	10355060	0.027030001																																										0.211999998	G	0.109099999	G			Bot	(T/C)
rs16925876	9	10355636	0.027030001																																						0.027030001	T	0.161400005	T	0.73150033	C	0.714399993	T			BOT	(T/C)
rs12551331	9	10356812	0.389099985																																						0.829999983	C	0.825299978	T	0.389099985	T	0.551699996	T	0.975899994	T	Bot	(T/C)
rs1359091	9	10357106	0.544700027																																						0.760900021	C	0.90170002	C	0.802399993	A	0.739499986	C	0.850799978	A	Top	(A/C)
rs10738162	9	10359161	0.053856389																																						0.544700027	C	0.787000001	T	0.667100012	T	0.792100012	T	0.7852	T	Bot	(T/C)
rs1535661	9	10359368	0.053856389	-	A	T	0.944936638	A	0.142542066	B	0.289986723	B	0.654678868	A	0.845707787	B	0.323596728	A	0.524718716	B	0.816089836	A	0.894699991	A	0.987242032	A	0.107199997	A	0.97139497	B	0.733220403	A	0.220017475	0.053856389	A	0.522400022		0.965311338	B														
rs4595175	9	10359718	0.056315519																																						0.606299996	A	0.676299989	C	0.903400004	A	0.913900018	C			TOP	(A/C)
rs1535660	9	10361073	0.017720001	-	A	G	0.870254275	B	0.056315519	A													0.78640002	A			0.2861	B					0.39261852	A		1			0.367974032	A												
rs1535658	9	10361281	0.017720001	+	A	G	0.807095033	A	0.15716828	B	0.236574651	B	0.130952476	B	0.904045567	A	0.845840217	A	0.079543695	B	0.424370621	A	0.877200007	A	0.389302337	B	0.017720001	A	0.813941697	B	0.449637562	B	0.373705519	A	0.185618187	A	0.759199977		0.737201791	B	0.703000009	T	0.567399979	C	0.348500013	T	0.667699993	T	0.616999984	C	Bot	(T/C)
rs1323487	9	10361401	0.02681	-	A	G	0.412404097	A	0.139773667	B	0.990267918	B	0.502521993	A	0.752046856	A	0.797621149	A	0.053952011	B	0.279452319	A	0.784300029	A	0.882906088	A	0.02681	A	0.494440482	B	0.089651096	B	0.89797559	0.871846729	A	0.835900009		0.869812864	A														
rs16925896	9	10361980	0.099809997	+	C	T	0.875565906	B	0.583732626	A													0.205599994	B			0.099809997	B		B			0.895238429				0.559400022		0.243869105	B												
rs16925900	9	10362488	0.395000011																																						0.415800005	A	0.561999977	A	0.395000011	A	0.88319999	G			TOP	(A/G)
rs7028956	9	10362651	0.091909997																																						0.738300026	A	0.715499997	A	0.643400013	A	0.507700026	G			Top	(A/G)
rs1323486	9	10363974	0.091909997																																						0.554700017	G	0.672900021	G	0.391600013	G	0.091909997	G	0.210500002	A	Bot	(T/C)
rs7864680	9	10364460	0.064580001																																										0.586899996	A	0.489899993	G			Top	(A/G)
rs6474539	9	10364705	0.064580001																																						0.662100017	G	0.336199999	G	0.708000004	G	0.1228	G	0.064580001	T	Top	(A/C)
rs7867199	9	10370406	0.310200006																																						0.984499991	G	0.316000015	A	0.615999997	A	0.421099991	G	0.428600013	G	Bot	(T/C)
rs10959084	9	10371819	0.025117146																																						0.995999992	G	0.310200006	T	0.734700024	T	0.386299998	G	0.460099995	G	Top	(A/C)
rs7873950	9	10375072	0.025117146	-	A	G	0.57177701	B	0.0833429	A	0.437532263	A	0.462727201	A	0.965963736	B	0.772278823	A	0.582230103	A	0.70237696	B	0.506299973	A	0.025117146	A	0.2861	B	0.87905761	B	0.447695465	A	0.979169599	0.03385835	A	0.900600016		0.532335603	A														
rs12006444	9	10376641	0																																						0.308800012	C	0.598999977	C	0.954699993	A	0.953000009	A	0.656099975	C	Top	(A/C)
rs16925940	9	10379249	0	-	G	T	0.043479341	A	0.031452559	B													0.797800005	B			0	B		B			0.31637658				0.382600009		0.405559498	B												
rs1407920	9	10379328	0.061734009	-	C	G	0.77309738	B	0.061734009	B													0.985899985	A			0.557399988	A		B			0.350574015				1		0.992509676	B												
rs1407919	9	10379420	0.032604373	+	A	T	0.236065967	A	0.083841912	A													0.932799995	A			0.222100005	B					0.458509082	A			0.697300017		0.968708433	B												
rs1407918	9	10379895	0.011010161	+	A	C	0.091782532	B	0.639281192	A													0.535700023	B			0.370799989	A		B			0.032604373				0.796700001		0.425830503	B												
rs1407915	9	10380243	0.011010161	+	A	G	0.020479214	B	0.017765291	A	0.220228455	B	0.053119405	A	0.438270954	B	0.161793343	A	0.011010161	A	0.585189925	A	0.535700023	B	0.196553168	B	0.370799989	A	0.449482882	B	0.110532582	B	0.712246869	A	0.610996389	B	0.796700001		0.735746159	B												
rs10959088	9	10380416	0.138099998	+	C	T	0.678889144	A	0.27726808	A													0.886300027	B			0.557399988	B					0.578413219	A			0.837199986		0.849407976	B	0.309799999	T	0.138099998	T	0.351799995	T	0.202299997	T			Bot	(T/C)
rs10809084	9	10381459	0.242799997																																						0.430400014	G	0.463099986	G	0.969900012	T	0.783100009	T	0.242799997	T	Top	(A/C)
rs10756031	9	10381604	0.25819999																																						0.430400014	C	0.463099986	C	0.974600017	A	0.980199993	C	0.264200002	A	Bot	(T/G)
rs1924087	9	10384286	0.033190001																																						0.668799996	G	0.25819999	G	0.887499988	A	0.351399988	G			Top	(A/G)
rs10959090	9	10385912	0.033190001																																						0.4014	A	0.291799992	A	0.173099995	A	0.033190001	A	0.051410001	G	Top	(A/G)
rs10809086	9	10389727	0.056051953	+	G	T	0.586463868	A	0.056051953	B													0.755500019	B			0.363299996	A		B			0.896006699				1		0.202496019	B	0.362800002	G	0.415699989	G	0.361099988	G	0.253100008	G			TOP	(A/C)
rs12338949	9	10393105	0.010157465		C	T					0.78572203	B	0.866048148	B																					0.952885313	B																
rs12338949	9	10393105	0.010157465	+	C	T	0.289743962	A	0.687986438	A													0.47299999	B			0.306899995	A		B			0.010157465				1		0.058033213	B												
rs1359101	9	10396755	0.018487095																																						0.396499991	G	0.417600006	G	0.491899997	G	0.141900003	G	0.216100007	T	Top	(A/C)
rs4741032	9	10398149	0.018487095	-	G	T	0.990267793	B	0.018487095	B	0.298368512	A	0.748639444	B	0.743775681	A	0.672189012	A	0.488801522	B	0.077335113	B	0.910300016	B	0.49661902	A	0.306400001	A	0.407750064	B	0.292732909	A	0.525562459	0.344057263	B	1		0.86249763	B												
rs7023488	9	10398395	0.018190491	+	C	T	0.991415844	A	0.159213466	A	0.764453913	A	0.823157719	A	0.66473341	B	0.674628604	B	0.250067854	A	0.97863764	B	0.518000007	A	0.821328743	A	0.240700007	B	0.870491373	B	0.156605997	B	0.924825867	0.214872112	A	1		0.837826194	B	0.440899998	T	0.422100008	T	0.504100025	T	0.146699995	T	0.223399997	C	Bot	(T/C)
rs7023745	9	10398553	0	+	C	T	0.757707604	B	0.018190491	A	0.923291943	B	0.726696922	A	0.330658189	B	0.92168231	A	0.751398352	A	0.934002195	A	0.771700025	A	0.0578337	A	0.385500014	B	0.785268333	B	0.793568836	B	0.86024422	0.315459975	A	1		0.746911166	A	0.387699992	T	0.363099992	T	0.232299998	T	0.206300005	T			Top	(A/G)
rs1407929	9	10401066	0	-	A	G	0.127602048	A	0.606449484	B									0.175322829	B	0.955101028	A	0.632700026	A	0.950159663	A	0	B	0.366794191	B	0.921661338	B	0.318243285				0.382600009		0.425721355	B												
rs1407928	9	10401232	0.057132525	+	C	T					0.299682281	B	0.499944072	A																					0.929402592	A																
rs1359099	9	10401338	0.057132525	-	C	T	0.386270538	B	0.057132525	B					0.297291108	A	0.832682279	A	0.952890081	B	0.42748804	A	0.663299978	B	0.47853743	B	0.262300015	A	0.617136356	B	0.189422455	A	0.453729971				0.572399974		0.924439586	B												
rs1359098	9	10401393	0.174199998																																						0.722899973	T	0.87410003	T	0.371899992	T	0.252999991	T			TOP	(A/G)
rs7027091	9	10402112	0.03882884																																						0.458299995	T	0.34009999	T	0.1928	T	0.174199998	T			TOP	(A/C)
rs10809089	9	10404138	0.002684053	-	A	G	0.53218845	B	0.406167994	A	0.03882884	A	0.828307173	B	0.391986584	B	0.349645891	B	0.845859824	A	0.861494779	A	0.852199972	B	0.061962336	A	0.188600004	A	0.811168371	B	0.555100747	B	0.131760171	0.752086168	A	1		0.400493017	B												
rs7021239	9	10404204	0.002684053	-	A	G	0.776672942	A	0.002684053	A													0.584699988	A			0.262300015	B					0.341184908	A			0.500699997		0.66889093	A												
rs6474548	9	10406736	0																																						0.758599997	A	0.9727	G	0.111699998	A	0.033569999	A	0.291700006	G	Bot	(T/C)
rs12000332	9	10407526	0	+	C	T	0.131250325	B	0.028796282	A													0.90200001	A			0	A					0.017891161	A			0.382600009		0.698854744	A												
rs1407926	9	10410327	0.030239999	-	A	G	0.95918267	B	0.395117663	B													0.358700007	B			0.030239999	A		B			0.365235108				0.171100006		0.536339066	B												
rs10809092	9	10411687	0.099809997																																						0.440699995	T	0.176400006	T	0.121600002	T	0.421000004	T	0.273000002	C	Top	(A/G)
rs7849858	9	10413598	0.099809997	+	A	G	0.250005558	A	0.271480545	A													0.155200005	A			0.099809997	B		B			0.372981359				0.45629999		0.824955323	A	0.821799994	A	0.80339998	G	0.880900025	A	0.947899997	G			TOP	(A/G)
rs12344987	9	10413799	0.144800007	-	A	G	0.157527587	B	0.24482385	B													0.852199972	A			0.188600004	B					0.321955357	A			1		0.254018563	A												
rs12346029	9	10414164	0.091849063																																						0.526600003	T	0.171599999	T	0.379900008	T	0.795599997	T	0.144800007	C	Bot	(T/C)
rs6579064	9	10416186	0.02083632	-	C	G	0.118311342	A	0.566255027	A	0.778150237	A	0.695081114	A	0.848912273	A	0.632529895	A	0.098499312	B	0.992257031	B	0.522300005	B	0.359745356	A	0.462199986	A	0.999592766	A	0.5267254	B	0.606672448	A	0.539856348	A	0.654299974		0.091849063	B												
rs6684504	9	10417491	0.02083632		A	G					0.02083632	A	0.111523054	B																					0.354415663	B																
rs6684504	9	10417491	0.103921083	+	A	G	0.120562783	A	0.655453744	B									0.644022062	B	0.827512318	A	0.496499986	B	0.827833001	B	0.289200008	A	0.911239851	B	0.106898486	A	0.103921083				0.291599989		0.957207801	B												
rs585875	9	10417780	0.055701354																																										0.513300002	A	0.671999991	A			Top	(A/G)
rs687154	9	10418096	0	-	C	T	0.27458765	A	0.396669608	A	0.543599614	A	0.85850146	A					0.100635275	B	0.604043133	B	0.161300004	B	0.956034944	A	0.289200008	A	0.463705706	B	0.49015926	A	0.055701354	0.295280595	A	1		0.451667871	B												
rs679452	9	10418670	0	+	C	T	0.682047766	A	0.895118738	A	0.331633685	A	0.672153611	B					0.013331122	B	0.891100344	A	0.156100005	B	0.74282556	A	0	B	0.653499764	B	0.785606503	B	0.004896357	0.427460947	B	1		0.703096276	B												
rs592714	9	10418780	0.133585454																																										0.933799982	G	0.503700018	G			Bot	(T/C)
rs606202	9	10419464	0.133585454	-	A	C					0.72438141	B	0.133585454	A																					0.291094151	A																
rs12001636	9	10420089	0.035489999																																										0.238000006	A	0.595399976	A			Bot	(T/C)
rs649891	9	10420602	0.035489999																																						0.229000002	A	0.035489999	A	0.681800008	A	0.359499991	A	0.226600006	G	Top	(A/G)
rs619126	9	10422920	0.177000001																																						0.824699998	A	0.191499993	A	0.839999974	G	0.758400023	G			Top	(A/G)
rs569484	9	10423023	0.177000001																																						0.796000004	A	0.177000001	A	0.426800013	A	0.538500011	A	0.6972	C	Bot	(T/G)
rs6182088	9	10426451	0.02132																																						0.356199992	C	0.178700005	C	0.656999996	C	0.704999983	C			TOP	(A/G)
rs620558	9	10426921	0.00884263																																						0.028100001	T	0.02132	T	0.585699976	T	0.323599994	T	0.1259	C	Bot	(T/C)
rs16926034	9	10435439	0.000385423	-	A	G	0.171302014	B	0.00884263	B													0.576200008	A			0.370799989	B		B			0.214585315				0.470400006		0.951641045	A												
rs16926037	9	10436062	0.000385423	-	C	T	0.557639868	B	0.000385423	A	0.528410323	A	0.54996659	A	0.015064004	A	0.629392227	B	0.674315543	B	0.352313805	B	0.759899974	B	0.810647159	B	0.370799989	A	0.004886778	B	0.144822579	B	0.562576373	A	0.488193825	A	0.650600016		0.518509385	B												
rs10511546	9	10437115	0.165600002	+	A	G					0.84063789	B	0.424015452	B	0.404231196	A																									0.165600002	A	0.864600003	A	0.943300009	A	0.871900022	G	0.390100002	A	Bot	(T/C)
rs1565898	9	10438624	0.002501	-	A	G					0.462329105	B	0.553548647	B																					0.436913335	A																
rs1565898	9	10438624	0.002501	-	A	G	0.391417217	A	0.306996426	B													0.002501	B			0.754100025	A		B			0.116698791				0.471100003		0.815433386	A												
rs12338647	9	10442255	0.032205036	-	C	G	0.455496297	A	0.174282287	B													0.719299972	B			0.889699996	A					0.241363749	A			0.127299994		0.695559094	B												
rs10511547	9	10444895	0.032205036	+	C	G					0.032205036	A	0.319772588	B	0.929473555	A																																				
rs13297915	9	10449930	0.08794																																						0.874000013	A	0.760800004	A	0.433099985	G	0.138300002	G	0.868499994	G	Top	(A/G)
rs7850565	9	10452105	0.083970003																																						0.725300014	C	0.745700002	C	0.08794	T	0.204099998	T	0.609200001	T	Top	(A/G)
rs2382216	9	10453098	0.083970003																																						0.999499977	G	0.958800018	G	0.531799972	G	0.73299998	G	0.083970003	A	Bot	(T/C)
rs1537812	9	10454815	0.097570002																																						0.557200015	A	0.1479	A	0.722299993	A	0.955500007	G	0.488999993	G	Bot	(T/C)
rs4740452	9	10455127	0.097570002																																						0.834900022	A	0.316100001	A	0.193100005	A	0.097570002	A			TOP	(A/G)
rs4145898	9	10455175	0.03805																																						0.595899999	T	0.715399981	C	0.690100014	C	0.492799997	C			BOT	(T/C)
rs4740453	9	10455615	0.03805																																						0.532299995	C	0.03805	C	0.477400005	T	0.143800005	T			BOT	(T/C)
rs1335997	9	10457074	0	+	C	T	0.234957936	A	0.920893812	A													0.498199999	A			0.427700013	B		B			0.073331593				0.471599996		0.927730108	B												
rs16926057	9	10457283	0	-	G	T	0.767508346	A	0.139157514	A	0.243797444	B	0.966796948	A					0.941541796	B	0.994288988	A	0.213499993	B	0.549577344	B	0	A	0.866433603	B	0.566267323	B	0.140209045	A	0.985333645	A	0.045609999		0.539698697	A												
rs12343415	9	10458666	0.0231																																						0.733699977	C	0.257400006	A	0.411799997	A	0.02555	A	0.426699996	C	Bot	(T/G)
rs10809095	9	10458784	0.0231																																						0.813600004	T	0.821099997	C	0.148100004	C	0.0231	C			TOP	(A/G)
rs2152510	9	10461487	0.000426404	-	A	G	0.453299234	B	0.384381145	B	0.945315393	A	0.658548203	B					0.931504695	A	0.480398294	A	0.233899996	B	0.96833714	B	0.351599991	A	0.118547324	A	0.234238917	B	0.083230258	A	0.369954663	B	0.433400005		0.8428403	A												
rs1414557	9	10461937	0.000426404	+	C	G	0.624298022	B	0.719182355	A	0.239948267	B	0.931163789	A					0.366229219	B	0.006618115	B	0.204400003	A	0.511516491	A	0.500500023	B	0.110002413	B	0.168495956	A	0.000426404	0.281950346	A	0.539099991		0.793178392	B												
rs1999742	9	10463073	0.079808584	-	C	T					0.208242071	A	0.079808584	A																																						
rs16926062	9	10463380	0.083886579																																										0.326999992	C	0.584100008	C			Bot	(T/C)
rs2784624	9	10468387	0.081309997	+	A	G	0.23955756	A	0.880812321	A													0.662599981	B			0.282599986	A					0.083886579	A			0.804400027		0.820173293	B	0.090829998	T	0.654699981	T	0.725099981	C	0.727900028	C	0.458200008	C	Bot	(T/C)
rs1953594	9	10469376	0.081309997																																						0.830799997	A	0.920599997	A	0.266099989	A	0.101499997	A	0.081309997	G	Bot	(T/C)
rs976830	9	10469466	3.64732E-06	+	C	G					0.746107093	A	0.917271163	A																					0.445337986	A																
rs1953595	9	10469485	3.64732E-06	+	A	T	0.416436108	B	0.679544103	B	0.928039542	B	0.853471104	B	0.597819474	A	0.366672069	B	0.954081358	B	0.28401103	A	0.625400007	B	0.340970123	B	0.998300016	B	0.694679709	B	0.136757113	A	3.65E-06	0.16413865	B	0.515399993		0.628252892	A												
rs976831	9	10469527	0.012864086	-	A	G	0.449223301	A	0.679041441	B													0.730000019	B			0.366899997	A		B			0.012864086				0.267800003		0.856890134	B												
rs2784623	9	10469816	0.177900001																																						0.498299986	C	0.310299993	C	0.75	C	0.506699979	C			BOT	(T/C)
rs10756041	9	10469902	0.061437731																																						0.751600027	T	0.925100029	T	0.603799999	T	0.177900001	T	0.712199986	C	Bot	(T/C)
rs1855850	9	10470030	0.000159669	-	A	G	0.114036151	A	0.061437731	B													0.828299999	A			0.551500022	A		B			0.236165677				0.703299999		0.897068014	A	0.600399971	C	0.619000018	C	0.406899989	C	0.070809998	C			Bot	(T/C)
rs1855851	9	10470040	0.000159669	-	A	G					0.360817309	B	0.000159669	A																											0.265100002	T	0.100599997	T	0.964900017	T	0.969200015	C	0.6699	C	Top	(A/G)
rs1805197	9	10470168	0.070814762	+	A	G	0.214160777	A	0.71222831	B													0.925999999	B			0.743799985	B					0.091038637	A			0.523100019		0.945307951	B												
rs1855852	9	10470189	0.070814762	-	A	T	0.52786406	A	0.370938299	B													0.593299985	A			0.449600011	A		B			0.070814762				0.413199991		0.896716829	B												
rs2757858	9	10470542	0.063019998																																						0.247299999	A	0.387400001	A	0.370599985	A	0.214900002	A			Bot	(T/C)
rs1853231	9	10471115	0.013954897																																						0.4005	G	0.393400013	G	0.325399995	G	0.063019998	G	0.246000007	A	Top	(A/G)
rs1853232	9	10471205	0.013954897	+	C	T	0.013954897	B	0.983727754	B	0.21929082	A	0.146569577	A	0.850046503	A	0.613716781	A	0.731419099	A	0.331844127	B	0.749899983	B	0.027572289	B	0.582099974	A	0.057355417	B	0.195889655	B	0.893753668	A	0.873803278	A	1		0.887219003	A												
rs7870466	9	10471639	0.238900006																																						0.238900006	A	0.4287	A	0.341300011	A	0.266299993	A	0.82889998	C	Bot	(T/G)
rs2208708	9	10472033	0.321999997																																						0.654299974	G	0.844699979	G	0.680599988	A	0.779500008	A	0.321999997	G	Top	(A/G)
rs2784607	9	10474849	0.033270093																																						0.466600001	C	0.610599995	C	0.693499982	C	0.422100008	C	0.438199997	C	Bot	(T/C)
rs2484741	9	10477877	0.015764139	+	A	T	0.754867121	B	0.747765708	A	0.803469908	B	0.887475686	A	0.912011282	A	0.843729238	B	0.479305057	B	0.689118409	B	0.694000006	B	0.126327661	B	0.255499989	B	0.358174659	B	0.033270093	A	0.492107763	A	0.542213454	B	0.371499986		0.809900822	B												

Continued on next page

Supplementary Table S1. ***Continued.***

rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgjda_P	jgjda_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	IlmnStrand	ACTG
rs833408	9	10480752	0.015764139		A	G					0.957051283	A	0.106576215	B																					0.015764139	B					0.375800014	T	0.600700021	T	0.823300004	C	0.58859998	C	0.232899994	T		Top	(A/G)
rs833408	9	10480752	0.144119127	-	A	G	0.518753519	A	0.155468077	B					0.655378766	B	0.859842802	B	0.15731842	B	0.985272671	A	0.545899987	B	0.278067561	A	0.267399997	B	0.320299168	B	0.144119127	A	0.216773047	A			0.340600014		0.355134674	A	0.375800014	T	0.600700021	T	0.823300004	C	0.58859998	C	0.232899994	T		Top	(A/G)
rs833438	9	10485432	0.2174																																										0.509999991	A	0.541199982	A				Top	(A/G)
rs7019813	9	10485679	0.069994386																																						0.328099996	C	0.446799994	C	0.781199992	T	0.507700026	T	0.2174	C		Top	(A/G)
rs11555483	9	10487345	0.037133102	-	C	T	0.44003971	A	0.23880058	B													0.483500004	B			0.306499988	B					0.069994386	A			0.236300007		0.599248285	A													
rs2027177	9	10488582	0.037133102	+	C	G	0.220919059	B	0.07288614	B	0.037133102	B	0.274746462	B	0.283588678	B	0.388058707	B	0.82499294	A	0.948127977	A	0.254799992	B	0.871935095	A	0.300500006	A	0.639323992	B	0.192900807	B	0.358773813	A	0.756616718	A	0.780099988		0.07265349	B													
rs833446	9	10491928	0.048829999																																						0.7148	C	0.659500003	T	0.048829999	C	0.248300001	C				BOT	(T/C)
rs2181156	9	10491953	0.053309999																																						0.653699994	G	0.682699978	T	0.947399974	T	0.279500008	G	0.053309999	T		Bot	(T/G)
rs12337486	9	10492827	0.144584602																																						0.344000012	C	0.342200011	C	0.74879998	C	0.353500009	C				BOT	(T/C)
rs2784631	9	10494304	0.116599999	+	C	T	0.144584602	A	0.174625912	B													0.602199972	A			0.289200008	A			B		0.351601747				1		0.732086574	B													
rs833417	9	10495161	0.071454534																																						0.974399984	G	0.568700016	G	0.74150002	A	0.400299996	G	0.116599999	A		Top	(A/G)
rs1360895	9	10495619	0.071454534	-	C	G	0.694799169	B	0.631652834	B													0.644900024	B			0.991699994	B					0.071454534	A			0.310600013		0.806455996	B													
rs10217547	9	10496028	0.020686408	+	A	G	0.142686846	B	0.164581367	B	0.472069987	B	0.573293136	A	0.243497027	A	0.623397351	A	0.747777454	B	0.139292773	A	0.829400003	B	0.64394942	A	0.572000027	A	0.967004233	B	0.34972025	B	0.535006171		0.426501102	A	0.425199986		0.949454661	A													
rs10959130	9	10496167	0.020686408	+	A	G	0.897793808	A	0.304787611	A													0.201399997	A			0.319499999	B			B		0.339672109				0.167500004		0.020686408	A													
rs2784589	9	10499682	0.033464608	+	A	C	0.987194089	B	0.612920093	A	0.176649399	B	0.265884703	A	0.705386637	A	0.25304979	A	0.932305132	A	0.033464608	A	0.686699987	B	0.445272691	A	0.289000005	B	0.499658396	B	0.100045726	A	0.276268559		0.793316454	B	0.100100003		0.045325461	A													
rs2784590	9	10500289	0.03452	-	A	G					0.048571005	B	0.76566706	B																					0.467964067	A					0.317900002	T	0.889199972	C	0.03452	T	0.305700004	T	0.471899986	T		Bot	(T/C)
rs2784592	9	10500683	0.064709999		C	T					0.318085144	B	0.765855119	B																					0.376460884	B					0.064709999	C	0.183400005	C	0.550199986	C	0.736500025	C	0.972299993	C		Bot	(T/C)
rs12379948	9	10502117	0.03941879	+	G	T	0.747867709	B	0.135615476	B													0.681100011	B			0.584699988	A					0.911201086	A			0.605300009		0.848320332	A													
rs2784598	9	10502307	0.013386569	+	C	T					0.213835149	B	0.541301099	B																					0.03941879	B																	
rs2784598	9	10502307	0.013386569	+	C	T	0.017987922	A	0.174457105	B					0.013386569	B	0.367502205	B	0.0710796	A	0.140137789	B	0.038090002	B	0.544105891	B	0.421299994	B	0.191322737	B	0.221608448	A	0.432662232				0.126800001		0.103633832	A													
rs10511548	9	10504108	0.039976156	+	A	G					0.779050741	B	0.169749083	B	0.694891018	A																																					
rs10756048	9	10505244	0.039976156	+	C	T	0.281163781	A	0.302265649	B													0.367300004	B			0.701099992	B					0.039976156	A			0.26910001		0.583230281	B													
rs10756051	9	10505524	0.025660001	-	A	G	0.518436724	B	0.097145397	B													0.535700023	B			0.978100002	A					0.87354462	A			0.428600013		0.393529446	B													
rs2757859	9	10505720	0.025660001	+	C	T	0.421184985	A	0.242007553	B													0.335900009	B			0.574000001	B			B		0.69105759				0.025660001		0.28790943	B													
rs10115302	9	10506888	0.01061	-	A	G	0.350344835	B	0.963206451	B													0.43810001	A			0.131500006	A			B		0.618747675				0.1065		0.046821952	B													
rs2757863	9	10508177	0.01061																																						0.226500005	C	0.081519999	C	0.189700007	C	0.043960001	C	0.01061	T		Top	(A/G)
rs2757864	9	10508231	0.031202418	-	A	G	0.514109055	A	0.29490777	B	0.88457846	A	0.285347633	A	0.478575966	B	0.107112631	A	0.531288033	A	0.198805232	B	0.885100007	A	0.78766224	B	0.77670002	A	0.079389459	B	0.036662703	B	0.670867868	A	0.461028402	A	0.442200005		0.064302052	B													
rs833402	9	10510172	0.031202418	+	C	T	0.195961095	A	0.404253096	B					0.031202418	B	0.660520942	A	0.08162349	A	0.743722528	B	0.953299999	B	0.078180253	A	0.219300002	B	0.043204415	B	0.286611313	A	0.332641799	A			0.726599991		0.164902602	A													
rs833403	9	10513334	0.038100001																																						0.04857	G	0.038100001	G	0.981000006	A	0.876900017	A	0.055399999	A		Bot	(T/C)
rs1322304	9	10513383	0.006924562	+	A	T	0.76264576	B	0.620623818	B													0.361999989	B			0.184200004	B			B		0.258703802				0.243200004		0.436052083	A													
rs4461952	9	10513685	0.006924562	-	A	G	0.195413588	A	0.402734964	B	0.095790336	A	0.006924562	B					0.851066679	B	0.161497807	B	0.109099999	A	0.596115302	A	0.240700007	A	0.676278502	B	0.840495292	B	0.136316452		0.941528706	A	0.164900005		0.157671156	B													
rs702128	9	10513720	0.007646																																						0.412499994	T	0.211799994	T	0.386200011	T	0.157000005	T	0.717000008	T		Bot	(T/C)
rs10809111	9	10514292	0.007646	-	C	G	0.139348016	B	0.204294189	A	0.704193705	A	0.959332794	A	0.285251734	B	0.363547827	A	0.968159903	A	0.18931955	B	0.572799981	B	0.211400552	B	0.1373	B	0.350373255	B	0.304285801	A	0.818060853	A	0.067332621	A	0.007646		0.869800066	A													
rs10959147	9	10516845	0.01391	+	A	G	0.766803965	B	0.431116084	A	0.205434432	A	0.711229922	A	0.636456636	B	0.25016827	B	0.835061457	A	0.367697462	B	0.492900014	B	0.689700822	B	0.087169997	B	0.332990869	B	0.755738241	A	0.043169852		0.263991433	A	0.01391		0.06885029	A													
rs833428	9	10517999	0.032760002																																						0.330799997	C	0.423000008	C	0.238900006	C	0.65200001	C				TOP	(A/G)
rs702130	9	10520844	0.032760002																																						0.480500013	C	0.708400011	C	0.04149	T	0.032760002	T	0.707099974	C		Top	(A/G)
rs10959149	9	10520953	0.053078497																																						0.1128000 2	A	0.129199997	A	0.571390003	A	0.587199986	A				TOP	(A/G)
rs10756060	9	10521641	0.053078497	-	C	T	0.422769413	B	0.053078497	B													0.737900019	A			0.59920001	B					0.388731803	A			0.280800015		0.377808901	B	0.369899988	A	0.202000007	A	0.585600019	A	0.322400004	A				TOP	(A/G)
rs833430	9	10521820	0.00032837	-	C	T	0.797375825	B	0.25786884	A													0.604900003	A			0.994300008	A					0.286219216	A			0.722899973		0.972566794	A													
rs833431	9	10521892	0.00032837	+	C	T	0.365572736	A	0.345865849	B	0.92198485	A	0.505400769	B	0.003088116	A	0.637011981	B	0.079241508	B	0.620610248	B	0.675000012	A	0.508611238	B	0.597599983	B	0.364948637	B	0.903447437	B	0.00032837		0.453213957	B	1		0.371981308	B													
rs833435	9	10524642	0.72299999																																						0.836300015	C	0.72299999	T	0.73180002	C	0.772899985	C				TOP	(A/G)
rs2757868	9	10525959	0.02035																																						0.738699973	A	0.807699978	C	0.97149998	A	0.902400017	A				TOP	(A/C)
rs2784609	9	10528067	0.0177																																						0.484899998	T	0.403600007	T	0.02788	T	0.02035	T	0.9005	T		Top	(A/C)
rs1335999	9	10528336	0.0177																																						0.529299974	G	0.434799999	G	0.024219999	G	0.0177	G	0.786199987	G		Top	(A/G)
rs10809117	9	10531177	0.032069609	-	A	C	0.645413115	B	0.032069609	B													0.577199996	B			0.77670002	B					0.42652462	A			0.434599996		0.554375088	B													
rs10959161	9	10533899	0.054710001																																						0.442600012	C	0.99089998	C	0.557799995	A	0.173800007	A	0.289099991	C		Bot	(T/G)
rs2181158	9	10536257	0.04865	-	A	C	0.663793361	A	0.211888116	A	0.990542666	B	0.39634306	B	0.892941128	A	0.951127939	A	0.302239799	A	0.107823357	B	0.900900006	B	0.871839819	A	0.05886	A	0.570284587	B	0.606116069	A	0.417442158		0.596876821	B	0.058600001	A	0.251931804	B	0.112599999	T	0.054710001	T	0.850199997	T	0.488700002	T	0.230599999	G		Top	(A/C)
rs2146093	9	10536779	0.035248025																																						0.102200002	G	0.04865	G	0.912899971	G	0.513000011	G	0.253500015	T		Top	(A/C)
rs1008981	9	10536814	0.035248025	+	C	T	0.32783009	A	0.409092186	B	0.270673183	B	0.601831084	B	0.227531743	B	0.739788757	B	0.397913518	B	0.381187041	A	0.8398	B	0.482909666	A	0.781799972	A	0.595643047	B	0.035248025	B	0.760551798		0.617501599	B	0.304100007		0.864146834	A	0.958100021	T	0.644299984	T	0.108099997	T	0.060860001	T	0.765999973	C		Top	(A/G)
rs833454	9	10537403	0.02688																																						0.412699997	C	0.725799978	C	0.405200005	C	0.481900007	C	0.509000003	C		Bot	(T/C)
rs833455	9	10537481	0.014477592	-	A	G	0.837465982	B	0.527193615	B													0.222499996	B			0.485399991	B					0.521784652	A			1		0.340518655	B	0.104900003	C	0.0704	C	0.04056	C	0.02688	C	0.991699994	C		Bot	(T/C)
rs833456	9	10537886	0.014477592	+	A	T					0.348124439	A	0.014477592	B																					0.751470626	A																	
rs833456	9	10537886	0.024720474	+	A	T	0.204987437	A	0.220612446	B					0.262830436	A	0.756255205	A	0.024720474	B	0.062092631	B	0.407999992	A	0.247349051	B	0.462199986	A	0.102881593	B	0.671209612	B	0.027974789				1		0.429842394	A													
rs10511549	9	10538235	0.009537338	+	C	G					0.913911281	B	0.477503476	A	0.772534866	A																																					
rs10511549	9	10538235	0.009537338	+	C	G	0.817675125	A	0.038630972	A					0.613137871	B	0.609281987	A	0.825645513	B	0.165826462	A	0.773000002	B	0.475528243	A	0.523999989	A	0.552858756	A	0.076082249	A	0.009537338	A			0.283600003		0.159365187	A													
rs10959163	9	10538301	0.011627735																																						0.95569998	T	0.946799994	T	0.942099989	G	0.157700002	G				TOP	(A/C)
rs10959164	9	10539054	0.011627735	-	C	T	0.884828823	A	0.072143666	A													0.949500024	A			0.104099996	A					0.011627735	A			0.01953		0.396791992	B													
rs10809118	9	10539418	0.002329																																						0.089910001	T	0.030780001	T	0.678799987	T	0.408199996	T				Top	(A/G)
rs2784611	9	10541203	0.002329	-	C	T	0.412126966	A	0.736679515	B													0.754999995	A			0.149900004	B			B		0.019575148				0.002329		0.166244053	A	0.384799987	A	0.3125	A	0.008695	G	0.00931	G	0.0656	G		Top	(A/G)
rs1885507	9	10542653	0.26820001																																						0.26820001	G	0.470000002	G	0.330799997	G	0.474400014	G	0.453399986	G		Bot	(T/C)
rs1885508	9	10542890	0.01297																																						0.310499996	A	0.502499998	A	0.683600009	A	0.308299989	A	0.414000005	A		Bot	(T/G)
rs1322307	9	10542932	0.001573	+	C	T					0.148988648	A	0.106329217	B																					0.027475688	B					0.278699994	C	0.286799997	C	0.01297	T	0.045910001	T	0.3028	T		Bot	(T/C)
rs1322307	9	10542932	0.001573	+	C	T	0.044439072	A	0.494700237	B					0.024087284	A	0.040928023	B	0.022886194	B	0.351030562	B	0.609399974	B	0.094870747	A	0.131099999	A	0.68623845	B	0.627157528	B	0.079058777	A			0.001573		0.094621798	B	0.278699994	C	0.286799997	C	0.01297	T	0.045910001	T	0.3028	T		Bot	(T/C)
rs10809119	9	10545039	0.03328																																						0.101999998	C	0.03328	C	0.707799971	C	0.491299987	C	0.33129999	T		Bot	(T/C)
rs833411	9	10545358	0.03421																																						0.485900015	G	0.197500005	G	0.342599988	G	0.2007	G	0.818099976	G		Bot	(T/C)
rs833412	9	10545471	0.03421																																						0.854300022	G	0.833700001	G	0.305599988	G	0.327699989	G	0.03421	G		Bot	(T/G)
rs833413	9	10545561	0.1215																																						0.694500029	T	0.904900014	T	0.634999991	T	0.484600008	T	0.1215	C		Top	(A/G)
rs833415	9	10547349	0.001338128																																						0.362599999	C	0.7852	C	0.812699974	T	0.484400004	C	0.967299998	T		Top	(A/G)
rs833416	9	10548102	0.001102	-	A	C	0.191766397	B	0.693729532	A	0.677403031	B	0.178492208	A	0.074429885	B	0.797653251	A	0.012815391	A	0.101845325	A	0.790199995	A	0.995308777	B	0.811200023	A	0.064811766	A	0.228193449	A	0.001338128	A	0.484284272	B	0.885900021		0.70216356	A	0.781300008	G	0.625500023	T	0.691699982	T	0.283100009	G				Top	(A/C)
rs2475432	9	10549329	0.001102	+	G	T	0.012833773	B	0.445214516	B													0.639999986	B			0.405699998	A			B		0.138551243				0.001102		0.091270771	B	0.416000009	G	0.592199981	G	0.182899997	T	0.466500014	T	0.335099995	T		Bot	(T/G)
rs2757873	9	10550924	0.02892																																						0.849799991	A	0.596600016	G	0.856000006	G	0.3917	A	0.86589998	G		Bot	(T/C)
rs10756061	9	10551180	0.02892																																						0.44659999	C	0.346100003	C	0.513599992	C	0.354200006	C	0.02892	T		Top	(A/G)
rs2038592	9	10551818	0.077069998																																						0.56160003	C	0.369899988	C	0.269199997	C	0.368400008	C	0.077069998	T		Bot	(T/C)
rs7849535	9	10552354	0.02372																																						0.54430002	C	0.341899991	C	0.269199997	C	0.347499996	C	0.089709997	T		Top	(A/G)
rs1322310	9	10552824	0.02372	-	G	T	0.578382289	B	0.064817476	A	0.443108902	A	0.838453599	A	0.720414409	B	0.482068775	B	0.494504363	A	0.056475488	A	0.664200008	A	0.775576492	A	0.757399976	A	0.623687282	A	0.143096026	A	0.517952906	A	0.260640276	B	0.439500004		0.119834592	A	0.558499992	C	0.304199994	C	0.267500013	C	0.129800007	C	0.02372	A		Top	(A/C)
rs1322311	9	10552903	0	+	A	C	0.703028115	B	0.195732585	A													0.823499978	A			0.970700026	B					0.966892545	A			0.773100019		0.210214546	A													
rs10121720	9	10554549	0	-	C	T	0.892133832	A	0.884133801	A													0.64230001	A			0	A					0.645203438	A			1		0.715591786	B													
rs1475111	9	10554866	0.001055	-	G	T	0.18036325	A	0.85745343	B	0.761841714	A	0.293597277	B	0.11388848	A	0.832970024	A	0.872720587	A	0.71010141	A	0.111299999	A	0.333644205	B	0.443100005	B	0.881942623	B	0.855715771	A	0.009017403		0.705514688	A	0.001055		0.526240183	B	0.597199976	A	0.440400004	A	0.538900018	C	0.325100005	C				BOT	(T/G)
rs10809121	9	10555574	0.0307																																						0.415699989	T	0.201100007	T	0.148800001	T	0.094839998	T	0.061250001	C		Top	(A/G)
rs7465708	9	10555658	0.0307	-	G	T	0.371523706	B	0.621401911	A													0.647199988	A			0.518999994	A			B		0.406661255				0.815400004		0.270439866	A	0.142000005	C	0.147599995	C	0.0307	C	0.082419999	C	0.748700023	A		Top	(A/C)
rs7862929	9	10559351	0.113499999																																						0.448100001	A	0.609600008	A	0.113499999	C	0.403600007	C	0.337599993	C		Bot	(T/G)
rs10959172	9	10559790	0.139699996																																						0.619499981	T	0.289900005	T	0.207100004	T	0.215900004	T	0.139699996	C		Bot	(T/C)
rs7025227	9	10562103	0.09663																																						0.869700015	T	0.486200005	C	0.968599975	T	0.383899987	T	0.788500011	C		Bot	(T/C)
rs988954	9	10562234	0.02581																																						0.243100002	G	0.541199982	G	0.09663	T	0.230599999	T	0.291999996	T		Top	(A/C)
rs17203683	9	10562433	0.014863774	+	C	T					0.966632146	A	0.298364561	B																					0.44381318	A					0.334100008	T	0.226999998	T	0.02581	T	0.043729998	T				TOP	(A/G)
rs17203683	9	10562433	0.014863774	+	C	T	0.800523126	B	0.542605781	A									0.196982782	A	0.163145136	B	0.3829	B	0.014863774	A	0.915899992	A	0.924916431	B	0.146301627	B	0.178968007				0.202099994		0.152050722	B	0.334100008	T	0.226999998	T	0.02581	T	0.043729998	T				TOP	(A/G)
rs7025985	9	10562534	0.01619	+	A	G	0.228124503	B	0.18673106	B	0.127143682	A	0.401818223	B					0.090230143	B	0.4176381	A	0.979700029	B	0.371292712	A	0.131400004	A	0.579358074	B	0.352874865	B	0.880496455		0.811594288	A	0.01619		0.076684133	B	0.375200003	A	0.3937000 04	G	0.216800004	G	0.520799995	A		Top	(A/G)
rs17792943	9	10563347	0.001427727																																						0.448500007	C	0.403499991	C	0.320600003	A	0.372200012	A	0.432300001	C		Bot	(T/G)
rs1322313	9	10564153	0.001427727	-	C	G	0.067153833	B	0.040548591	A	0.690351152	A	0.478587409	A	0.001427727	B	0.241363638	A	0.363288875	A	0.09172661	A	0.676400006	A	0.119386659	A	0.811200023	A	0.284829471	A	0.596822599	B	0.026047242	A	0.219289615	B	0.665400028		0.27605087	A													
rs1322314	9	10564347	0.01474																																						0.296799988	A	0.744700015	A	0.245299995	G	0.712599993	G	0.717400014	A		Top	(A/G)
rs12344079	9	10564929	0.01474																																						0.035670001	G	0.222800002	G					0.01474	A		Bot	(T/C)
rs1923442	9	10565161	0.020734239																																						0.100199997	T	0.036060002	T	0.810599983	C	0.739000022	T	0.037620001	C		Top	(A/G)
rs17793027	9	10565711	0.020734239	+	C	G	0.17878931	B	0.401844348	A	0.341877682	B	0.290711149	A					0.271238724	A	0.628129083	B	0.126699999	B	0.573675522	A	0.850499988	A	0.12163074	B	0.623539945	B	0.020734239		0.1192211	A	0.514199972		0.114856563	B													
rs7039334	9	10565728	0.03923																																										0.76819998	A	0.665799975	G				Bot	(T/C)
rs10756063	9	10567775	0.03923																																						0.137500003	T	0.03923	T	0.505299985	C	0.419400007	C	0.050280001	C		Bot	(T/C)
rs10738168	9	10570326	0.050650001																																						0.149100006	G	0.320199996	G	0.050650001	T	0.127000004	T				Top	(A/C)
rs7037887	9	10570865	0.02551515																																						0.166899994	G	0.153999999	G	0.521099985	G	0.617299974	G	0.107799999	G		Top	(A/G)
rs10756064	9	10571198	0.02551515	+	C	T	0.348376092	A	0.05230125	A	0.173723679	A	0.900979903	A	0.295293262	B	0.810908825	B	0.02551515	B	0.739052739	A	0.065860003	A	0.080104182	A	0.492500007	A	0.147401704	B	0.629171481	A	0.160822625		0.348185365	B	0.124300003		0.106084846	B	0.081359997	C	0.03076	C	0.962599993	C	0.465200007	C	0.031580001	T		Top	(A/G)
rs10118067	9	10571221	0																																										0.864300013	C	0.924399972	C				Bot	(T/C)
rs10959175	9	10571373	0	+	A	G	0.002136822	A	0.068333428	B	0.048898954	A	0.133999929	B	0.219210933	B	0.777359594	A	0.280235679	B	0.416975282	B			0.195684473	A	0	B	0.344566449	B	0.184003624	A	0.13592731		0.527551051	A	1		0.351107255	A													
rs10959176	9	10571485	0.016051287	+	A	C	0.298085744	B	0.813917335	B	0.969311065	A	0.322307049	A	0.208629557	B	0.734746377	A	0.994710175	B	0.885954029	A	0.710399985	A	0.195712086	B	0.197999999	A	0.360065009	B	0.561169635	B	0.045588058	A	0.950334879	A	1		0.016051287	B	0.440200001	A	0.073399998	A	0.464700013	A	0.49000001	C	0.522199988	A		Top	(A/C)
rs1322280	9	10572246	0.0009016		

Supplementary Table S1. ***Continued.***

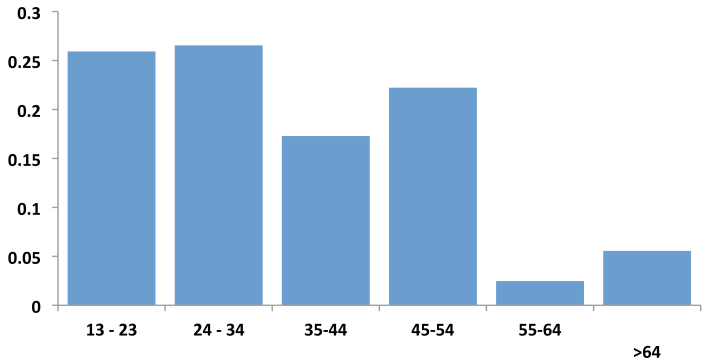
rs_id	CHR	position	p_{min}	strand	allele_a	allele_b	nidali_aa_P	nidali_aa_Phase	nidali_ea_P	nidali_ea_Phase	nida600k_aa_P	nida600k_aa_Phase	nida600k_ea_P	nida600k_ea_Phase	jgjda_P	jgjda_Phase	taiw_P	taiw_Phase	hm_dep_P	hm_dep_Phase	eca_P	eca_Phase	PS_P	PS_Phase	BRN_P	BRN_Phase	CNII_PVAL	CNII_Phase	HM_P	HM_Phase	LER_P	Lerman_Phase	PIP_P	PIP_Phase	R1_P	rose_phase	ROSE2_PVAL	ROSE2_Phase	VEC_P	VEC_Phase	SAGE_EA_COC_pval	SAGE_EA_COC_phase	SAGE_WH_ALC_pval	SAGE_WH_ALC_phase	SAGE_AA_COC_pval	SAGE_AA_COC_phase	SAGE_BL_ALC_pval	SAGE_BL_ALC_phase	Treut_pval	Treut_phase	Ilmn Strand	ACTG
rs1160259	9	10575399	0.000311187	+	A	G	0.31787579	A	0.000689015	B													0.819999993	B			0.907100022	B					B				0.590319249		0.65140003		0.73154319	B										
rs1322286	9	10576174	0.000311187	+	A	T	0.412739251	B	0.000311187	A													0.458499998	A			0.542900026	A					B				0.851346696		0.291799992		0.196803574	B										
rs13298283	9	10576527	0.012990588	+	A	C	0.467185197	B	0.012990588	B	0.386024209	B	0.620575901	B	0.814302887	A	0.516592426	A	0.879497445	A	0.783822739	B	0.0605	B	0.249767148	B	0.492500007	B	0.731932959	A	0.906914768	A	0.086363944	A	0.098799578	A	0.120099999		0.107893087	A	0.102300003	C	0.05139	C	0.313899994	A	0.756099999	A			BOT	(T/G)
rs10120974	9	10578373	0.043907863		C	G					0.083695884	B	0.043907863	B																					0.322728188	B																
rs1322291	9	10582492	0.037187049																																						0.858500004	T	0.601899982	C	0.530200005	C	0.341500014	C	0.958400011	C	Top	(A/G)
rs2382219	9	10584052	0.037187049	-	A	G	0.052278382	A	0.037187049	B													0.517700017	B			0.492199987	B					B				0.308952041		0.74970001		0.137848255	B										
rs10756066	9	10585208	0.02313																																						0.613499999	A	0.385100007	A	0.263999999	A	0.1087	A			Top	(A/C)
rs7018798	9	10585912	0.02313	-	G	T	0.394435959	B	0.560226555	A													0.599799991	B			0.0317	B					0.086096394	A			0.02313		0.069835938	A										
rs1407398	9	10586853	0.032979999																																						0.127200007	C	0.05917	C	0.643000007	C	0.485599995	T	0.639299989	T	Bot	(T/C)
rs10809130	9	10588429	0.032979999																																						0.924000025	C	0.783500016	C	0.032979999	T	0.341899991	T	0.852299988	T	Bot	(T/C)
rs2181153	9	10591839	0.045243668	+	C	G					0.938202594	B	0.101867023	A	0.351184765	A																																				
rs1018557	9	10591978	0.007453	+	A	C					0.203759506	B	0.045243668	B																											0.077119999	A	0.378600001	A	0.950900018	A	0.869300008	A	0.007453	C	Top	(A/C)
rs977124	9	10592787	0.007453	-	G	T					0.622964332	A	0.320002939	B	0.677731287	B																																				
rs1923438	9	10593029	0.08162	+	A	G					0.848891267	B	0.76006883	A	0.260901884	A																																				
rs1923438	9	10593029	0.0137	+	A	G	0.763903638	A	0.309009733	A													0.08162	B			0.197500005	B					B				0.27678552		0.320899993		0.493960725	A										
rs2382220	9	10593102	0.0137																																						0.126800001	A	0.146500006	A	0.0137	A	0.159600005	A	0.790600002	G	Top	(A/G)
rs1573018	9	10593372	0.000603465																																						0.429800004	T	0.503799975	T	0.165399998	T	0.999899983	T	0.711300015	C	Top	(A/G)
rs2208706	9	10594375	0.000603465	+	A	G	0.319107759	A	0.640788841	A													0.509899974	B			0.428299993	B					B				0.000603465				0.083560713	A										
rs2208706	9	10594375	0.000964818	+	A	G	0.599956111	A	0.313923533	A	0.720067039	A	0.603701463	A	0.838711613	A	0.94649305	B	0.61242804	B	0.140416951	A	0.462700009	B	0.691133382	B	0.428299993	B	0.574819002	B	0.443038116	A	0.04732132		0.849402586	A	0.447600007		0.26026754	A										
rs10959196	9	10596301	0.000964818	-	A	G	0.683565701	B	0.073288453	A	0.012627329	A	0.000964818	A	0.262813276	A	0.943426546	A	0.702849739	B	0.453622474	A	0.812399983	A	0.794085531	A	0.130199999	A	0.327985573	B	0.180706817	B	0.962477053		0.020790754	A	0.709900022		0.004278735	B										
rs2382222	9	10604555	0.032378652	-	G	T					0.347462235	A	0.032378652	B	0.107014837	B																									0.906000018	A	0.363900006	C	0.366699994	A	0.595300019	A			Bot	(T/G)
rs7873789	9	10607850	0.036300013	-	A	G	0.872895212	B	0.282054515	A	0.325274825	B	0.569731041	B	0.711493159	A	0.344647965	A	0.534628697	A	0.697624257	A	0.272799999	A	0.949417323	A	0.210199997	A	0.552672838	A	0.483959384	A	0.036300013	A	0.107970309	B	0.405900002		0.809228143	B										
rs10959204	9	10609618	0.081666945	+	C	T	0.793954826	A	0.655190641	B																	0.340499997	B									0.0816666945	A	1		0.754041758	B										
rs7863685	9	10610453	0.177588233	+	A	C	0.869626525	A	0.343837967	A													0.203299999	A			0.532000005	A									0.177588233	A	0.195600003		0.329187132	B	0.724399984	C	0.358599991	A	0.620000005	A	0.904100001	C			Bot	(T/G)
rs1407401	9	10610474	0.061423526																																						0.768100023	T	0.991699994	T	0.401899993	C	0.578400016	C			Bot	(T/C)
rs10733210	9	10614494	0.005533335	+	A	C	0.982262411	A	0.669601336	B													0.759899974	B			0.229699999	B					B				0.061423526		0.916199982		0.906835254	A										
rs10809140	9	10615637	0.005533335	-	A	T	0.029689776	A	0.403070937	A	0.773965928	B	0.045530006	A	0.359226408	A	0.485035098	A	0.234906173	B	0.005533335	B	0.639999986	A	0.629429246	B	0.329699993	A	0.629429246	B	0.144341431	A	0.757795546		0.767146883	A	0.926699996		0.388668872	B										
rs10756070	9	10616531	0.046038467	-	A	C	0.858676409	B	0.467513441	B	0.531969106	B	0.497111329	B	0.093928449	B	0.748040457	A	0.94079263	B	0.392380306	A	0.813600004	B	0.444739129	A	0.416700006	B	0.229450848	B	0.074945797	B	0.614676041		0.276647602	B	0.263900012		0.813069133	A	0.812900007	T	0.499000013	G	0.083800003	G	0.536599994	G	0.481999993	T	Bot	(T/G)
rs12344559	9	10617683	0	+	A	G	0.680705494	B	0.488306061	A	0.628253069	A	0.601561838	A	0.046038467	B	0.626261527	A	0.17398679	A	0.774576579	B	0.1329	B	0.408837197	A	0.257499993	A	0.95131159	B	0.396056972	B	0.418428329	A	0.139346556	B	0.370299995		0.791674359	B										
rs12004716	9	10617746	0	-	A	C	0.404443234	B	0.79132824	A													0.420300007	B			0	A					0.002856265	A			0.515100002		0.796882223	A										
rs7040565	9	10618454	0.099430002	+	A	G	0.126141469	A	0.24499757	B													0.886900008	B			0.910300016	A			B		0.416740986				1		0.693343825	A										
rs7030247	9	10619471	0.024995536																																										0.250400007	T	0.099430002	T			Bot	(T/G)
rs16926188	9	10620233	0.024995536	+	C	G	0.353545351	B	0.548483084	B	0.73267573	B	0.43058356	B	0.078428533	A	0.540973882	A	0.024995536	A	0.106475766	B	0.537899971	B	0.41236553	A	0.05477	A	0.763861796	B	0.567346	B	0.563793687	A	0.299375926	B	0.53490001		0.54731868	A										
rs7042995	9	10620986	0.035274305	-	A	T	0.911682708	A	0.715105856	B	0.466140993	B	0.232011299	A	0.248018381	A	0.760544061	A	0.275573121	A	0.767963545	B	0.316399992	B	0.035274305	A	0.105899997	A	0.898082634	B	0.893913304	B	0.645238141	A	0.576565027	B	0.1787		0.495023263	A										
rs1322295	9	10621603	0.067599997																																						0.815299988	C	0.591499984	T	0.741900027	T	0.859899998	T			BOT	(T/C)
rs10738172	9	10624079	0.044459999																																						0.895699978	G	0.624899983	G	0.808300018	A	0.869700015	G	0.067599997	G	Top	(A/G)
rs10756072	9	10625939	0.044459999	-	C	T	0.440503916	A	0.084185918	B													0.560500026	B			0.044459999	B			B		0.199921803				0.529100001		0.487745446	A										
rs7021385	9	10626346	0.049040001	+	A	G	0.941562431	A	0.484752429	A													0.25850001	A			0.049040001	B			B		0.447513197				0.878300011		0.555630232	B										
rs1040910	9	10627778	0.049236786	-	A	G					0.406456812	B	0.049236786	A																					0.968428625	B							0.693099976	A	0.808200002	A	0.896899998	A	0.859200001	A	0.144099996	G	Top	(A/G)
rs1040910	9	10627778	0.037532642	-	A	G	0.249430119	A	0.320210903	A					0.078426794	A	0.766509644	B	0.854843534	B	0.656172367	A	0.822799981	A	0.677447615	B	0.395799995	A	0.304628053	B	0.31925873	A	0.948760277	A			0.786000013		0.230209783	B	0.693099976	A	0.808200002	A	0.896899998	A	0.859200001	A	0.144099996	G	Top	(A/G)
rs4741044	9	10629445	0.037532642	+	A	G					0.099132099	B	0.037532642	A																					0.099829111	B																
rs16926200	9	10629472	0.175300002		A	G					0.363762975	A	0.87070058	B																					0.826712341	A					0.82950002	A	0.596700013	G	0.238100007	G	0.490700007	G			TOP	(A/G)
rs984119	9	10630526	0.175300002																																						0.287699997	C	0.829999983	C	0.762700021	C	0.641600013	C	0.175300002	T	Bot	(T/C)
rs7040199	9	10632041	0.050172176																																						0.594299972	T	0.900399983	T	0.996200025	C	0.755200028	T			Bot	(T/C)
rs1998340	9	10635268	0.050172176	-	C	G	0.192312069	A	0.050172176	B													0.428499997	B			0.451200008	B			B		0.89290116				1		0.466564563	B										
rs10809144	9	10637333	0.005847511																																						0.884000003	T	0.4736	T	0.353300005	C	0.418500006	C	0.178599998	T	Bot	(T/C)
rs10511550	9	10638555	0.005847511	+	A	T					0.885141281	A	0.005847511	B	0.140089691	A																																				
rs10511551	9	10638782	0.028337523	-	A	C					0.239471731	A	0.028337523	B	0.102199281	A																																				
rs1923439	9	10638898	0.194292901	-	A	C					0.407342461	B	0.615874187	B	0.320985042	A																																				
rs1322303	9	10639309	0.194292901	+	A	G					0.728790106	B	0.194292901	B	0.564970328	A																																				
rs1998341	9	10639385	0.000134828																																						0.519900024	G	0.816200018	A	0.243100002	A	0.622200012	A	0.416500002	A	Top	(A/G)
rs2208707	9	10639660	0.000134828	+	A	G					0.017178577	B	0.000134828	A	0.044973333	A																									0.630200028	A	0.685100019	A	0.855499983	A	0.736899972	A			TOP	(A/G)

A

Cause of death	%
Injuries	0.329
Cardiovascular disease	0.286
Accident	0.128
Pulmonary thromboemboli	0.056
Opiate/mixed intoxification	0.037
Asthma	0.012
Drowning	0.012
Gunshot wound	0.012
Hanging	0.012
Compressional asphyxia	0.012
Complications from cancer	0.012
Asphyxia by hanging	0.006
Cardiac arrest	0.006
Cardiac tamponade	0.006
Cardiomegaly	0.006
Cocaine intoxication	0.006
Complications of liver cirrhosis	0.006
Electrocution	0.006
Gastric perforation	0.006
Natural	0.006
Nonketoic hyperglycinemia	0.006
Peritonitis	0.006
Pneumonia	0.006
Respiratory failure	0.006
Sepsis	0.006
Undertermined	0.006

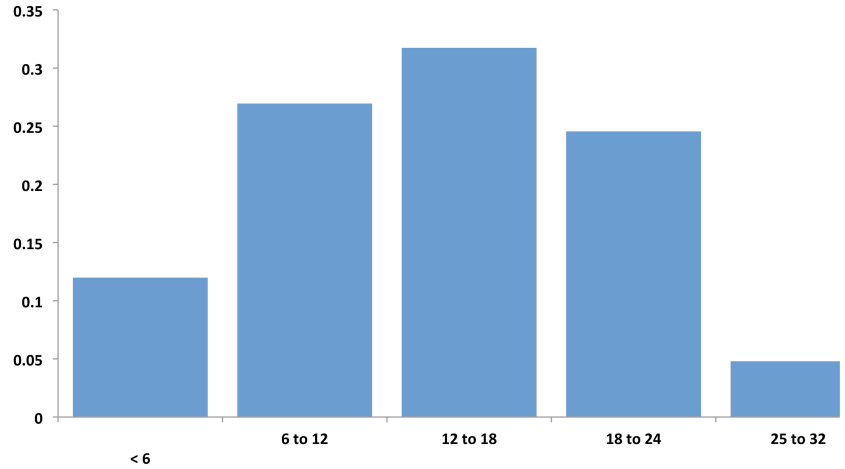
Causes of death of samples from which associations between mRNA levels and SNP genotypes are identified.

B



Ages at death of samples from which associations between mRNA levels and SNP genotypes are identified. X axis: reported age at death (years). Y axis: Fraction of samples.

C



Postmortem intervals for samples from which associations between mRNA levels and SNP genotypes are identified. X axis: reported PMI (hours). Y axis: Fraction of samples.

Supplementary Figure S2. Causes of death (A), ages of death (B) and postmortem intervals (C) for samples used for study of PTPRD mRNA expression levels in individuals with different PTPRD haplotype.