

SUPPLEMENTARY INFORMATION FOR

**Asians and other races express similar levels of and share the same genetic
polymorphisms of the SARS-CoV-2 cell-entry receptor**

Y. Chen, K. Shan, and W. Qian

Supplementary Information includes Supplementary Figures S1-3 and Supplementary
Tables S1-3.

SUPPLEMENTARY FIGURES

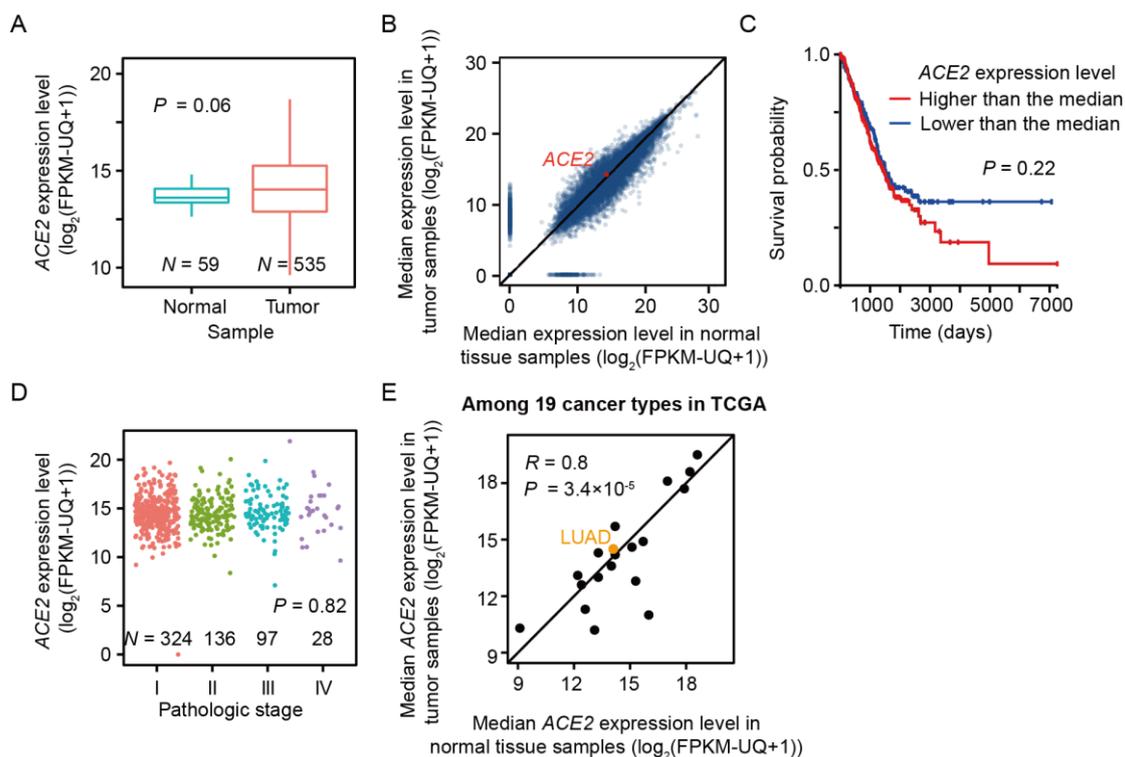


Figure S1. The expression of *ACE2* in primary lung tumors can reflect that in normal lung tissues.

(A) Comparison of *ACE2* expression levels between primary tumor and solid normal tissue among TCGA LUAD samples. Outliers are not shown. *P*-values are calculated with two-tailed Mann-Whitney *U* tests.

(B) The similarity in the expression level of all protein-coding genes between primary tumor and solid normal tissue among TCGA LUAD samples. Each dot represents a gene, the median expression level of which among all tumor or normal samples is shown.

(C) Relationship between survival probability and *ACE2* expression level among TCGA LUAD samples. The plot is generated with UCSC Xena. The *x*-axis represents the last time in days that any individual in the plot is known to be alive.

(D) Comparison of *ACE2* expression among pathologic stages among TCGA LUAD samples. *P*-values are calculated with analyses of variance. Only those samples with reported pathologic stages are shown.

(E) The similarity of *ACE2* expression between primary tumors and solid normal tissues across cancer types in TCGA. Each dot represents one cancer type. The plot

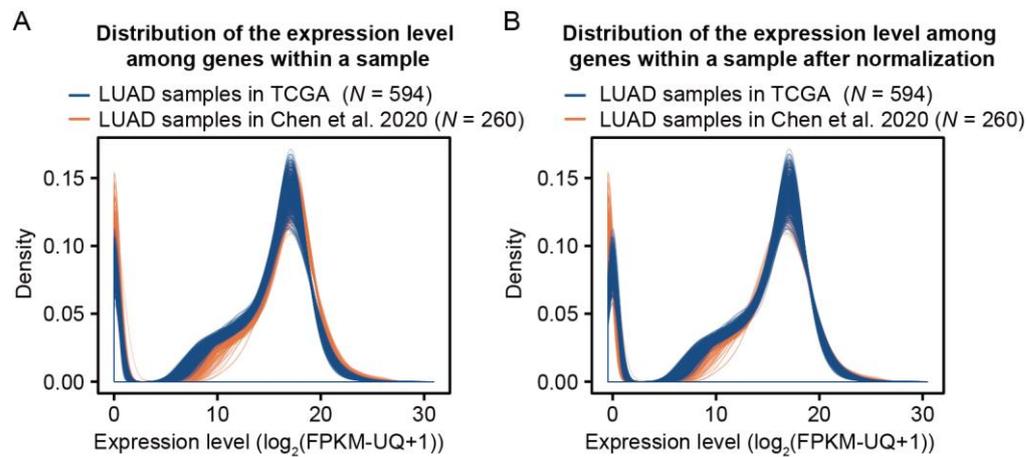


Figure S3. Distribution of the expression level among genes within a sample, before (A) and after (B) median normalization. We estimated the median expression level (in the unit of $\log_2(\text{FPKM-UQ}+1)$) of all genes in all LUAD samples from Chen *et al.* (2020a) and that from TCGA. The normalization is performed by adding the difference between these two medians to the expression level of each gene in each sample of Chen *et al.* Density curves represent individual LUAD samples from either TCGA (blue) or Chen *et al.* (orange).

SUPPLEMENTARY TABLES

Table S1. The median expression level of *ACE2* ($\log_2(\text{FPKM-UQ} + 1)$) among cancer types.

Cancer type	Primary tumor		Solid normal tissue	
	The median expression level of <i>ACE2</i>	# of samples	The median expression level of <i>ACE2</i>	# of samples
Bladder Cancer (BLCA)	13.0	411	13.3	19
Breast Cancer (BRCA)	10.2	1097	13.1	113
Colon Cancer (COAD)	17.7	469	17.9	41
Endometrioid Cancer (UCEC)	13.1	547	12.2	35
Esophageal Cancer (ESCA)	14.3	161	13.3	11
Glioblastoma (GBM)	10.3	155	9.1	5
Head and Neck Cancer (HNSC)	14.6	500	15.1	44
Kidney Chromophobe (KICH)	11.0	65	16.0	24
Kidney Clear Cell Carcinoma (KIRC)	18.6	534	18.2	72
Kidney Papillary Cell Carcinoma (KIRP)	19.5	288	18.6	32
Liver Cancer (LIHC)	12.8	371	15.3	50
Lung Adenocarcinoma (LUAD)	14.5	524	14.1	59
Lung Squamous Cell Carcinoma (LUSC)	14.2	501	14.2	49
Pancreatic Cancer (PAAD)	15.7	177	14.2	4
Prostate Cancer (PRAD)	11.3	498	12.6	52
Rectal Cancer (READ)	18.1	166	17.0	10
Stomach Cancer (STAD)	14.9	375	15.7	32
Testicular Cancer (TGCT)	12.6	150	12.4	6
Thyroid Cancer (THCA)	13.6	502	14.0	58

Table S2. A linear model that predicts *ACE2* expression among LUAD samples from the race, age, and sex. Both samples from TCGA and from Chen *et al.* (2020a) are included.

Formula: $\log_2(\text{FPKM-UQ} + 1) \sim \text{race} + \text{age} + \text{sex}$

	Estimate	Standard error	<i>t</i> statistic	<i>P</i> value	Sum of squares
African vs. Asian	0.02	0.27	0.06	0.95	3.04
European vs. Asian	-0.12	0.14	-0.85	0.39	
Age	0.026	0.007	3.8	1×10^{-4}	48.39
Male vs. Female	-0.26	0.13	-2.0	0.05	13.54
Residuals					2699.02

Table S3. Variations of *ACE2* on human genome assembly GRCh37.

ID	Position	Allele		Allele frequency		Region or type
		Reference	Alternate	All	East Asians	
rs184503057	X:15619071	C	T	0.0003	0.0000	5 prime UTR
rs370596467	X:15619068	T	C	0.0005	0.0013	5 prime UTR
rs73635825	X:15618980	A	G	0.0008	0.0000	missense
rs761614932	X:15618960	G	A	0.0003	0.0013	synonymous
rs4646116	X:15618958	T	C	0.0021	0.0000	missense
rs768558803	X:15618927	G	A	0.0005	0.0000	synonymous
rs199804629	X:15618918	C	T	0.0003	0.0000	synonymous
rs780370002	X:15618838	T	C	0.0003	0.0000	intron
rs769814070	X:15618830	T	C	0.0003	0.0000	intron
rs745976731	X:15618790	G	A	0.0003	0.0000	intron
rs187959864	X:15618769	G	T	0.0003	0.0000	intron
rs757774161	X:15618737	C	T	0.0005	0.0000	intron
rs752177050	X:15618671	G	A	0.0003	0.0000	intron
rs184064003	X:15618628	G	A	0.0003	0.0000	intron
rs758847937	X:15618576	T	C	0.0003	0.0000	intron
rs753384690	X:15618573	G	A	0.0003	0.0000	intron
rs191536933	X:15618509	G	T	0.0003	0.0013	intron
rs760198844	X:15618490	A	C	0.0003	0.0013	intron
rs376237761	X:15618476	T	G	0.0003	0.0013	intron
rs767198373	X:15618432	C	G	0.0003	0.0013	intron
rs761648066	X:15618430	T	A	0.0003	0.0013	intron
rs4646117	X:15618429	G	C	0.0024	0.0000	intron
rs4646118	X:15618408	C	T	0.0275	0.0000	intron
rs762827221	X:15618342	C	T	0.0008	0.0039	intron
rs188512350	X:15618337	G	A	0.0032	0.0000	intron
rs770007642	X:15618286	T	C	0.0003	0.0000	intron
rs745889792	X:15618282	T	C	0.0005	0.0026	intron
rs4646119	X:15618278	A	G	0.0278	0.0000	intron
rs771084054	X:15618238	G	C	0.0003	0.0013	intron
rs114165600	X:15618117	T	A	0.0074	0.0000	intron
rs183661335	X:15618094	A	G	0.0024	0.0000	intron
rs1978124	X:15618063	T	C	0.7947	0.9935	intron
rs2106809	X:15618061	A	G	0.3163	0.5223	intron
rs779800164	X:15618014	GA	G	0.0003	0.0000	intron
rs146087218	X:15617968	G	T	0.0005	0.0000	intron
rs183655025	X:15617931	G	C	0.0003	0.0000	intron
rs536176596	X:15617896	T	C	0.0008	0.0000	intron
rs756838418	X:15617815	C	A	0.0013	0.0000	intron
rs751400951	X:15617811	G	A	0.0003	0.0000	intron
rs764121831	X:15617779	A	G	0.0003	0.0013	intron

rs762585917	X:15617763	GC	G	0.0003	0.0000	intron
rs4646120	X:15617736	G	A	0.7354	0.9935	intron
rs765074206	X:15617731	G	A	0.0003	0.0013	intron
rs4646121	X:15617730	C	T	0.0270	0.0000	intron
rs200217737	X:15617708	C	CA	0.0201	0.0039	intron
rs770869109	X:15617682	G	A	0.0005	0.0000	intron
rs189944937	X:15617594	A	G	0.0003	0.0000	intron
rs4646122	X:15617566	A	G	0.0495	0.0000	intron
rs772649487	X:15617473	ACT	A	0.0008	0.0000	intron
rs748727373	X:15617391	G	A	0.0011	0.0000	intron
rs182808331	X:15617367	A	G	0.0008	0.0000	intron
rs190147327	X:15617366	C	G	0.0021	0.0000	intron
rs4646123	X:15617301	C	T	0.0307	0.0000	intron
rs780917663	X:15617255	A	G	0.0005	0.0000	intron
rs79473368	X:15617101	A	T	0.0003	0.0013	intron
rs751083574	X:15617025	C	G	0.0003	0.0000	intron
rs186957036	X:15617020	T	C	0.0005	0.0000	intron
rs181786494	X:15616940	C	A	0.0008	0.0000	intron
rs550649522	X:15616873	A	G	0.0053	0.0000	intron
rs4646124	X:15616796	T	C	0.8037	0.9935	intron
rs759349845	X:15616773	G	C	0.0003	0.0013	intron
rs754020501	X:15616753	CTATT AAAA	C	0.0016	0.0000	intron
rs147417432	X:15616744	G	A	0.0005	0.0026	intron
rs4646125	X:15616730	A	T	0.0045	0.0000	intron
rs773333399	X:15616684	A	G	0.0005	0.0000	intron
rs189821013	X:15616582	G	A	0.0016	0.0079	intron
rs762374469	X:15616576	G	A	0.0005	0.0026	intron
rs775043341	X:15616545	G	A	0.0003	0.0000	intron
rs532429719	X:15616496	G	A	0.0082	0.0000	intron
rs749698415	X:15616461	T	C	0.0003	0.0013	intron
rs780641412	X:15616447	T	A	0.0003	0.0013	intron
rs187390194	X:15616426	C	G	0.0005	0.0026	intron
rs746697417	X:15616368	T	C	0.0003	0.0000	intron
rs181788868	X:15616337	A	C	0.0024	0.0000	intron
rs757953905	X:15616258	G	C	0.0003	0.0000	intron
rs138763015	X:15616219	C	G	0.0037	0.0183	intron
rs778855128	X:15616187	C	G	0.0003	0.0000	intron
rs34481900	X:15616103	C	CA	0.8090	0.9935	intron
rs753649591	X:15615958	C	G	0.0003	0.0000	intron
rs766147629	X:15615864	C	T	0.0003	0.0000	intron
rs145890723	X:15615861	C	A	0.0045	0.0000	intron
rs750654689	X:15615702	G	A	0.0003	0.0013	intron
rs767609706	X:15615697	A	T	0.0016	0.0079	intron

rs137910448	X:15615632	T	C	0.0117	0.0524	intron
rs774955609	X:15615627	G	T	0.0003	0.0000	intron
rs769289562	X:15615608	T	A	0.0003	0.0000	intron
rs763350116	X:15615542	T	G	0.0003	0.0000	intron
rs775909653	X:15615541	C	T	0.0003	0.0013	intron
rs141554379	X:15615497	C	CA	0.6405	0.8338	intron
rs746651491	X:15615478	A	G	0.0003	0.0000	intron
rs4646127	X:15615453	A	G	0.8093	0.9935	intron
rs771532843	X:15615402	G	A	0.0003	0.0000	intron
rs747663481	X:15615343	C	T	0.0003	0.0000	intron
rs183576751	X:15615340	A	G	0.0003	0.0000	intron
rs574410255	X:15615327	A	G	0.0011	0.0000	intron
rs753789245	X:15615217	G	C	0.0003	0.0000	intron
rs779872331	X:15615201	T	C	0.0003	0.0013	intron
rs755907504	X:15615164	T	A	0.0003	0.0000	intron
rs750605586	X:15615076	T	C	0.0003	0.0000	intron
rs191869625	X:15615068	C	A	0.0082	0.0000	intron
rs757336929	X:15615006	C	T	0.0003	0.0000	intron
rs751700532	X:15614956	G	A	0.0008	0.0000	intron
rs4646128	X:15614942	C	T	0.0201	0.0000	intron
rs189810201	X:15614912	T	C	0.0005	0.0000	intron
rs6632677	X:15614872	G	C	0.0207	0.0681	intron
rs765588449	X:15614870	C	A	0.0003	0.0000	intron
rs4646129	X:15614857	C	T	0.0241	0.0000	intron
rs184589032	X:15614794	C	T	0.0003	0.0000	intron
rs771727154	X:15614787	T	C	0.0003	0.0000	intron
rs747857461	X:15614746	C	T	0.0003	0.0000	intron
rs768560726	X:15614663	G	GT	0.8358	0.9935	intron
rs768198190	X:15614609	G	T	0.0005	0.0013	intron
rs749231176	X:15614591	T	TC	0.0003	0.0000	intron
rs193159186	X:15614492	C	A	0.0003	0.0000	intron
rs755895114	X:15614481	A	C	0.0008	0.0000	intron
rs745651366	X:15614468	G	A	0.0003	0.0000	intron
rs781505471	X:15614427	T	C	0.0003	0.0000	intron
rs757537854	X:15614303	T	C	0.0013	0.0000	intron
rs751896231	X:15614287	T	C	0.0005	0.0000	intron
rs764237919	X:15614283	T	C	0.0003	0.0000	intron
rs146598386	X:15614250	G	T	0.0026	0.0000	intron
rs2023802	X:15614145	G	A	0.8042	0.9935	intron
rs765668990	X:15613956	T	C	0.0003	0.0000	intron
rs759889612	X:15613939	T	C	0.0016	0.0000	intron
rs546624063	X:15613852	G	T	0.0029	0.0000	intron
rs766799501	X:15613734	T	C	0.0003	0.0013	intron
rs761427875	X:15613685	C	G	0.0003	0.0000	intron

rs774043141	X:15613648	T	C	0.0003	0.0000	intron
rs768102017	X:15613575	G	A	0.0003	0.0000	intron
rs748776104	X:15613532	T	A	0.0003	0.0000	intron
rs775429072	X:15613434	T	C	0.0003	0.0013	intron
rs769630719	X:15613314	T	G	0.0003	0.0013	intron
rs745874361	X:15613288	C	A	0.0005	0.0026	intron
rs188271923	X:15613135	A	C	0.0003	0.0000	intron
rs201900069	X:15612969	C	T	0.0003	0.0013	missense; splice region
rs199612962	X:15612945	T	G	0.0003	0.0013	intron
rs778171944	X:15612851	TA	T	0.0003	0.0000	intron
rs758438344	X:15612685	G	T	0.0003	0.0000	intron
rs183452730	X:15612560	C	T	0.0003	0.0013	intron
rs60122685	X:15612537	C	T	0.0032	0.0000	intron
rs755438853	X:15612469	T	C	0.0003	0.0000	intron
rs4646131	X:15612443	GA	G	0.8034	0.9935	intron
rs766711562	X:15612416	A	G	0.0003	0.0000	intron
rs192479337	X:15612357	T	C	0.0008	0.0000	intron
rs59021449	X:15612256	G	A	0.0003	0.0000	intron
rs763655179	X:15612240	G	C	0.0003	0.0013	intron
rs762464593	X:15612234	A	G	0.0003	0.0013	intron
rs774846829	X:15612191	T	C	0.0003	0.0013	intron
rs769411271	X:15612170	C	T	0.0005	0.0000	intron
rs759359471	X:15612153	T	C	0.0003	0.0013	intron
rs191336106	X:15612138	T	G	0.0016	0.0000	intron
rs770810608	X:15612123	T	C	0.0003	0.0000	intron
rs746806021	X:15612010	G	A	0.0003	0.0000	intron
rs778085723	X:15611990	T	C	0.0003	0.0013	intron
rs772173093	X:15611902	G	C	0.0003	0.0000	intron
rs748472374	X:15611891	T	C	0.0003	0.0013	intron
rs778830865	X:15611887	A	C	0.0003	0.0000	intron
rs755137624	X:15611884	T	A	0.0003	0.0000	intron
rs188292876	X:15611779	T	C	0.0005	0.0000	intron
rs182777784	X:15611771	C	A	0.0003	0.0013	intron
rs756400968	X:15611731	GTC	G	0.0003	0.0000	intron
rs191961425	X:15611671	C	T	0.0016	0.0000	intron
rs139797356	X:15611650	C	G	0.0003	0.0000	intron
rs762506566	X:15611555	T	C	0.0019	0.0000	intron
rs146122606	X:15611514	A	AAAGG AAGG	0.8204	0.9921	intron
rs764629489	X:15611476	C	T	0.0026	0.0000	intron
rs186597267	X:15611429	C	A	0.0024	0.0000	intron
rs776643970	X:15611286	G	A	0.0005	0.0000	intron
rs138854040	X:15611283	T	A	0.0207	0.0681	intron

rs4646133	X:15611115	A	G	0.0045	0.0000	intron
rs150550484	X:15611065	G	C	0.0013	0.0065	intron
rs181989524	X:15611063	T	C	0.0003	0.0000	intron
rs748299706	X:15610919	T	C	0.0003	0.0000	intron
rs4646134	X:15610900	C	T	0.0140	0.0000	intron
rs768583671	X:15610821	T	TA	0.0069	0.0000	intron
rs148006212	X:15610777	T	A	0.0050	0.0000	intron
rs780478736	X:15610730	G	C	0.0003	0.0013	intron
rs756597390	X:15610723	A	G	0.0008	0.0000	intron
rs143459173	X:15610660	T	C	0.0005	0.0000	intron
rs781378335	X:15610643	T	C	0.0003	0.0013	intron
rs73195521	X:15610588	T	A	0.0013	0.0000	intron
rs752242172	X:15610585	G	A	0.0003	0.0013	intron
rs764947941	X:15610558	A	G	0.0003	0.0013	intron
rs4646135	X:15610506	T	C	0.0286	0.0000	intron
rs200477770	X:15610461	A	G	0.0003	0.0013	intron
rs528054982	X:15610452	A	T	0.0003	0.0000	splice region; intron
rs2285666	X:15610348	C	T	0.3502	0.5366	splice region; intron
rs73195520	X:15610328	C	T	0.0013	0.0000	intron
rs201159862	X:15610324	T	C	0.0003	0.0000	intron
rs180878567	X:15610272	A	C	0.0016	0.0000	intron
rs560997634	X:15610247	A	G	0.0003	0.0000	intron
rs768883316	X:15610223	C	A	0.0003	0.0000	intron
rs188991352	X:15609782	T	C	0.0008	0.0000	intron
rs184978092	X:15609690	T	G	0.0003	0.0000	intron
rs181159881	X:15609568	A	G	0.0003	0.0000	intron
rs746353413	X:15609539	G	A	0.0005	0.0000	intron
rs781734031	X:15609538	C	T	0.0005	0.0000	intron
rs190384874	X:15609335	T	A	0.0016	0.0000	intron
rs747413977	X:15609296	T	C	0.0003	0.0000	intron
rs778056312	X:15609253	G	A	0.0003	0.0000	intron
rs184459616	X:15609179	G	A	0.0003	0.0000	intron
rs753583792	X:15609169	C	A	0.0011	0.0013	intron
rs765962210	X:15609161	T	A	0.0003	0.0000	intron
rs192674337	X:15609136	T	G	0.0013	0.0000	intron
rs187846474	X:15609097	T	C	0.0003	0.0000	intron
rs767489529	X:15609025	G	T	0.0003	0.0000	intron
rs761461930	X:15609016	G	A	0.0003	0.0000	intron
rs774186886	X:15608968	A	C	0.0003	0.0000	intron
rs757066	X:15608952	C	T	0.8564	0.9935	intron
rs184746393	X:15608948	G	C	0.0003	0.0000	intron
rs775739585	X:15608885	A	G	0.0003	0.0000	intron

rs769817857	X:15608883	A	G	0.0003	0.0013	intron
rs759693866	X:15608841	T	C	0.0011	0.0000	intron
rs530276695	X:15608749	T	C	0.0016	0.0000	intron
rs141377908	X:15608713	A	G	0.0016	0.0000	intron
rs747535302	X:15608648	G	A	0.0003	0.0000	intron
rs778249599	X:15608609	T	C	0.0003	0.0013	intron
rs772611994	X:15608553	C	T	0.0003	0.0000	intron
rs2048683	X:15608499	T	G	0.8034	0.9935	intron
rs192715876	X:15608454	G	A	0.0003	0.0000	intron
rs187504060	X:15608448	T	C	0.0003	0.0000	intron
rs183322022	X:15608391	C	T	0.0003	0.0000	intron
rs2158083	X:15608386	C	T	0.8082	0.9935	intron
rs757217310	X:15608350	T	C	0.0005	0.0000	intron
rs751494897	X:15608212	C	T	0.0003	0.0013	intron
rs763856662	X:15608204	T	C	0.0003	0.0000	intron
rs762760661	X:15608175	C	T	0.0003	0.0000	intron
rs752876987	X:15608067	A	G	0.0003	0.0000	intron
rs765450331	X:15607930	T	C	0.0003	0.0000	intron
rs759734759	X:15607850	C	G	0.0003	0.0000	intron
rs776766777	X:15607777	T	C	0.0003	0.0000	intron
rs770955003	X:15607743	T	A	0.0003	0.0000	NA
rs761220443	X:15607736	T	G	0.0003	0.0000	intron
rs187474513	X:15607715	A	T	0.0058	0.0000	intron
rs772522210	X:15607684	A	G	0.0003	0.0000	intron
rs971249	X:15607650	T	C	0.8032	0.9935	intron
rs779790336	X:15607552	C	G	0.0003	0.0000	missense
rs372272603	X:15607508	G	A	0.0003	0.0000	missense
rs745577714	X:15607301	T	C	0.0003	0.0013	intron
rs780725706	X:15607223	T	A	0.0003	0.0000	intron
rs756768276	X:15607199	TG	T	0.0005	0.0000	intron
rs751467781	X:15607174	C	A	0.0003	0.0000	intron
rs182858184	X:15607155	G	A	0.0005	0.0000	intron
rs190342052	X:15606895	G	T	0.0008	0.0000	intron
rs752476011	X:15606861	T	G	0.0003	0.0000	intron
rs765082657	X:15606747	C	G	0.0005	0.0000	intron
rs4646137	X:15606715	C	T	0.0037	0.0000	intron
rs754054202	X:15606682	C	T	0.0003	0.0000	intron
rs4646138	X:15606573	C	T	0.0146	0.0000	intron
rs760697154	X:15606397	A	T	0.0003	0.0000	intron
rs773784453	X:15606344	A	C	0.0003	0.0000	intron
rs768147521	X:15606293	T	C	0.0003	0.0000	intron
rs144523173	X:15606187	G	A	0.0013	0.0065	intron
rs774855440	X:15606182	T	C	0.0003	0.0000	intron
rs34161673	X:15606141	CT	C	0.0019	0.0000	intron

rs745514718	X:15605908	C	T	0.0003	0.0013	missense
rs4646140	X:15605852	C	T	0.0601	0.0327	intron
rs367784090	X:15605847	G	A	0.0003	0.0000	intron
rs186271730	X:15605744	C	T	0.0003	0.0000	intron
rs777629732	X:15605741	A	G	0.0003	0.0000	intron
rs758327912	X:15605737	C	T	0.0003	0.0000	intron
rs181796402	X:15605732	G	T	0.0024	0.0000	intron
rs4646141	X:15605601	G	A	0.0162	0.0000	intron
rs191099160	X:15605341	G	A	0.0024	0.0000	intron
rs754049423	X:15605335	G	A	0.0003	0.0013	intron
rs766511768	X:15605260	C	A	0.0003	0.0000	intron
rs756157043	X:15605214	C	T	0.0003	0.0000	intron
rs72614598	X:15605117	A	C	0.0228	0.0733	intron
rs181522566	X:15605013	T	C	0.0005	0.0013	intron
rs762382465	X:15605011	A	G	0.0003	0.0000	intron
rs189571339	X:15604962	A	C	0.0003	0.0013	intron
rs184680265	X:15604949	G	A	0.0003	0.0013	intron
rs1514279	X:15604865	G	A	0.8032	0.9935	intron
rs56700224	X:15604808	G	T	0.0238	0.0000	intron
rs770503434	X:15604608	A	C	0.0003	0.0013	intron
rs181620291	X:15604607	G	C	0.0011	0.0000	intron
rs372812138	X:15604426	C	T	0.0008	0.0039	intron
rs188895175	X:15604351	G	A	0.0024	0.0000	intron
rs141605946	X:15604350	C	T	0.0005	0.0000	intron
rs778744959	X:15604246	G	A	0.0003	0.0000	intron
rs754733661	X:15604238	C	A	0.0003	0.0000	intron
rs749046001	X:15604209	C	T	0.0003	0.0000	intron
rs4646187	X:15604188	C	A	0.0011	0.0000	intron
rs756403910	X:15604171	G	C	0.0003	0.0000	intron
rs750718432	X:15604145	G	A	0.0003	0.0000	intron
rs767685189	X:15604076	CA	C	0.0008	0.0000	intron
rs185005111	X:15604072	G	T	0.0003	0.0000	intron
rs193035703	X:15604071	G	T	0.0003	0.0000	intron
rs764515030	X:15604003	A	G	0.0003	0.0000	intron
rs138529167	X:15603988	G	A	0.0016	0.0000	intron
rs188007597	X:15603945	T	C	0.0011	0.0052	intron
rs765672945	X:15603933	T	G	0.0003	0.0000	intron
rs760298109	X:15603825	C	T	0.0003	0.0000	intron
rs772870891	X:15603805	A	G	0.0003	0.0000	intron
rs771528964	X:15603587	C	G	0.0003	0.0013	intron
rs41297301	X:15603508	G	T	0.0037	0.0000	intron
rs143102000	X:15603440	C	A	0.0101	0.0000	intron
rs768461103	X:15603354	G	C	0.0003	0.0000	intron
rs749310974	X:15603337	CA	C	0.0003	0.0013	intron

rs4646142	X:15603064	G	C	0.3587	0.5380	intron
rs193005774	X:15602955	C	T	0.0005	0.0000	intron
rs187045475	X:15602847	T	C	0.0003	0.0000	intron
rs781599525	X:15602789	T	C	0.0003	0.0000	intron
rs757340923	X:15602757	GTCT	G	0.0011	0.0000	intron
rs751606027	X:15602754	T	C	0.0021	0.0000	intron
rs777966991	X:15602731	G	T	0.0005	0.0000	intron
rs758827327	X:15602696	G	C	0.0003	0.0000	intron
rs143779699	X:15602651	C	T	0.0003	0.0013	intron
rs765534855	X:15602645	A	G	0.0003	0.0000	intron
rs182372519	X:15602305	C	G	0.0005	0.0000	intron
rs148977224	X:15602287	T	C	0.0003	0.0013	intron
rs767167539	X:15602218	T	G	0.0003	0.0000	intron
rs761507928	X:15602131	T	C	0.0003	0.0000	intron
rs192180091	X:15602072	T	C	0.0005	0.0000	intron
rs201424204	X:15602056	CTCTT	C	0.0273	0.0929	intron
rs762781979	X:15601825	G	T	0.0003	0.0000	intron
rs775523149	X:15601797	G	A	0.0021	0.0000	intron
rs187251131	X:15601740	T	C	0.0003	0.0013	intron
rs4646143	X:15601719	T	C	0.8275	0.9935	intron
rs4646144	X:15601695	G	A	0.0617	0.0327	intron
rs771266411	X:15601657	G	A	0.0011	0.0000	intron
rs747324201	X:15601627	G	C	0.0003	0.0000	intron
rs777691483	X:15601562	A	ATT	0.0013	0.0000	intron
rs758526582	X:15601469	C	T	0.0003	0.0000	intron
rs184178697	X:15601462	C	T	0.0005	0.0000	intron
rs191884180	X:15601392	A	G	0.0003	0.0013	intron
rs4646188	X:15601343	A	G	0.0437	0.0000	intron
rs186261546	X:15601282	A	C	0.0003	0.0000	intron
rs2316903	X:15601274	G	T	0.8278	0.9935	intron
rs756825265	X:15601201	T	C	0.0003	0.0013	intron
rs751277962	X:15601129	C	T	0.0003	0.0013	intron
rs763468141	X:15601111	T	C	0.0003	0.0000	intron
rs182550682	X:15601085	G	A	0.0005	0.0000	intron
rs189699255	X:15601075	C	T	0.0003	0.0000	intron
rs4646145	X:15601056	A	G	0.0238	0.0000	intron
rs759607498	X:15601004	T	C	0.0003	0.0000	intron
rs4646146	X:15600987	T	C	0.0193	0.0000	intron
rs151005246	X:15600966	G	A	0.0045	0.0196	intron
rs185723767	X:15600953	C	T	0.0003	0.0013	intron
rs4646147	X:15600744	T	A	0.8281	0.9935	intron
rs779020386	X:15600729	A	G	0.0003	0.0000	intron
rs2316904	X:15600691	C	T	0.8275	0.9935	intron
rs749831577	X:15600612	TGTG	T	0.0013	0.0000	intron

rs780378681	X:15600568	G	C	0.0003	0.0000	intron
rs756527097	X:15600227	TTAAA	T	0.0003	0.0013	intron
rs2048684	X:15600215	A	C	0.8323	0.9935	intron
rs763814382	X:15600139	A	G	0.0003	0.0000	intron
rs757789724	X:15600122	G	T	0.0005	0.0000	intron
rs752243712	X:15600037	T	C	0.0011	0.0000	intron
rs189140113	X:15599959	T	A	0.0005	0.0000	intron
rs138373349	X:15599892	T	TTTAA	0.8283	0.9935	intron
rs776731296	X:15599871	T	C	0.0005	0.0026	intron
rs186036909	X:15599843	C	T	0.0003	0.0013	intron
rs760521323	X:15599791	TA	T	0.0003	0.0000	intron
rs4646149	X:15599713	G	T	0.0037	0.0000	intron
rs182501431	X:15599649	A	G	0.0005	0.0026	intron
rs145954042	X:15599602	T	C	0.0003	0.0000	intron
rs190373279	X:15599584	C	T	0.0003	0.0000	intron
rs4646150	X:15599581	C	T	0.0135	0.0013	intron
rs749750821	X:15599507	C	T	0.0003	0.0000	missense
rs780574871	X:15599480	C	T	0.0003	0.0000	missense
rs185525294	X:15599420	T	A	0.0003	0.0000	missense
rs138390800	X:15599392	T	C	0.0008	0.0000	missense
rs147464721	X:15599363	G	A	0.0016	0.0000	synonymous
rs758067890	X:15599263	G	A	0.0003	0.0000	intron
rs752437962	X:15599251	C	A	0.0003	0.0013	intron
rs4646189	X:15599223	C	T	0.0016	0.0000	intron
rs754565421	X:15599222	T	C	0.0003	0.0013	intron
rs188037336	X:15599100	C	T	0.0003	0.0013	intron
rs766352866	X:15599026	A	G	0.0003	0.0000	intron
rs558797415	X:15598948	C	T	0.0008	0.0000	intron
rs4646151	X:15598934	C	A	0.0217	0.0000	intron
rs191611107	X:15598926	G	A	0.0005	0.0000	intron
rs187467963	X:15598808	G	T	0.0003	0.0000	intron
rs150909162	X:15598783	G	A	0.0005	0.0000	intron
rs183411746	X:15598708	C	T	0.0003	0.0000	intron
rs763029035	X:15598702	A	G	0.0003	0.0000	intron
rs377601841	X:15598644	T	G	0.0003	0.0000	intron
rs770321894	X:15598514	G	C	0.0003	0.0000	intron
rs746429452	X:15598429	C	T	0.0003	0.0013	intron
rs781591790	X:15598410	C	T	0.0003	0.0000	intron
rs771251213	X:15598406	C	G	0.0003	0.0000	intron
rs747762085	X:15598323	T	A	0.0003	0.0000	intron
rs141562322	X:15598170	T	A	0.0045	0.0000	intron
rs193290621	X:15598136	G	A	0.0005	0.0026	intron
rs4646152	X:15598024	A	G	0.8323	0.9935	intron
rs779494059	X:15597945	T	G	0.0003	0.0000	intron

rs4646153	X:15597835	C	T	0.8318	0.9935	intron
rs4646154	X:15597759	C	T	0.0024	0.0000	intron
rs767290993	X:15597748	C	A	0.0003	0.0013	intron
rs183880501	X:15597738	A	C	0.0011	0.0000	intron
rs4646190	X:15597568	A	G	0.0079	0.0000	intron
rs764317258	X:15597565	T	C	0.0003	0.0000	intron
rs763222471	X:15597538	GC	G	0.0011	0.0013	intron
rs775635749	X:15597538	G	A	0.0003	0.0000	intron
rs4646155	X:15597509	C	T	0.0615	0.0327	intron
rs201835187	X:15597391	A	AC	0.0019	0.0000	intron
rs777027746	X:15597362	G	C	0.0013	0.0000	intron
rs771354339	X:15597353	T	C	0.0003	0.0000	intron
rs747388862	X:15597306	C	G	0.0003	0.0013	intron
rs72614596	X:15597237	T	A	0.0228	0.0733	intron
rs189944736	X:15597226	T	C	0.0003	0.0000	intron
rs185182583	X:15597167	G	A	0.0024	0.0000	intron
rs4646156	X:15597043	A	T	0.8026	0.9935	intron
rs182802402	X:15597037	A	C	0.0024	0.0118	intron
rs745780713	X:15597004	T	C	0.0003	0.0013	intron
rs780999103	X:15596964	G	A	0.0003	0.0000	intron
rs187161283	X:15596909	A	G	0.0003	0.0000	intron
rs751346659	X:15596880	A	G	0.0003	0.0000	intron
rs145693360	X:15596844	C	T	0.0013	0.0065	intron
rs181695790	X:15596771	A	G	0.0003	0.0013	intron
rs752912805	X:15596763	A	C	0.0011	0.0000	intron
rs190055656	X:15596762	C	T	0.0005	0.0000	intron
rs187300691	X:15596681	C	T	0.0005	0.0000	intron
rs149958080	X:15596639	C	A	0.0013	0.0065	intron
rs4646157	X:15596602	T	C	0.0170	0.0000	intron
rs761329939	X:15596591	A	G	0.0003	0.0000	intron
rs773676270	X:15596345	T	C	0.0003	0.0000	synonymous
rs772610070	X:15596195	T	C	0.0003	0.0000	intron
rs371025504	X:15596175	A	G	0.0005	0.0000	intron
rs113691336	X:15596143	C	CAT AAG	0.8342	0.9935	intron
rs151205966	X:15596057	A	G	0.0005	0.0026	intron
rs745386140	X:15595982	C	T	0.0003	0.0013	intron
rs4646159	X:15595914	C	T	0.0193	0.0000	intron
rs757185703	X:15595751	G	A	0.0003	0.0000	intron
rs746990413	X:15595722	C	T	0.0003	0.0000	intron
rs182246050	X:15595656	C	T	0.0011	0.0000	intron
rs758213709	X:15595654	A	G	0.0008	0.0000	intron
rs752925446	X:15595594	G	A	0.0003	0.0000	intron
rs765389787	X:15595593	G	A	0.0005	0.0000	intron

rs188283144	X:15595582	G	C	0.0003	0.0000	intron
rs753858788	X:15595509	A	G	0.0003	0.0000	intron
rs4646161	X:15595467	C	G	0.0162	0.0000	intron
rs761237900	X:15595402	AGAG	A	0.0008	0.0000	intron
rs183546232	X:15595295	A	G	0.0042	0.0000	intron
rs767951083	X:15595058	G	A	0.0003	0.0000	intron
rs4646162	X:15595039	T	G	0.0093	0.0000	intron
rs775152799	X:15595001	T	C	0.0003	0.0013	intron
rs148408803	X:15594833	C	T	0.0042	0.0000	intron
rs770477981	X:15594818	A	G	0.0003	0.0000	intron
rs746901345	X:15594786	C	A	0.0008	0.0000	intron
rs777719785	X:15594685	C	T	0.0005	0.0000	intron
rs771840660	X:15594616	C	A	0.0003	0.0000	intron
rs747880274	X:15594505	T	C	0.0013	0.0000	intron
rs778835343	X:15594502	AT	A	0.0003	0.0000	intron
rs4646163	X:15594421	A	T	0.0098	0.0000	intron
rs754158836	X:15594420	G	C	0.0003	0.0000	intron
rs780229125	X:15594360	G	A	0.0003	0.0000	intron
rs756291245	X:15594254	T	A	0.0005	0.0026	intron
rs750890188	X:15594241	A	G	0.0003	0.0013	intron
rs768155490	X:15594182	TTTC	T	0.0005	0.0000	intron
rs762442440	X:15594176	C	A	0.0008	0.0000	intron
rs751870093	X:15593989	T	G	0.0003	0.0000	intron
rs199569050	X:15593920	G	A	0.0003	0.0000	synonymous
rs191860450	X:15593829	T	C	0.0005	0.0026	missense
rs200260858	X:15593697	CTG	C	0.0074	0.0026	intron
rs770390084	X:15593676	GTAGT	G	0.0013	0.0000	intron
rs760183795	X:15593623	G	C	0.0005	0.0026	intron
rs188496534	X:15593589	T	C	0.0005	0.0000	intron
rs771897370	X:15593471	G	A	0.0003	0.0000	intron
rs748155752	X:15593390	A	G	0.0003	0.0000	intron
rs184730109	X:15593320	G	A	0.0005	0.0013	intron
rs192914427	X:15593313	C	T	0.0003	0.0000	intron
rs188558468	X:15593258	C	A	0.0003	0.0013	intron
rs780426244	X:15593115	G	A	0.0003	0.0013	intron
rs756207504	X:15593090	A	G	0.0003	0.0013	intron
rs750520282	X:15592998	T	C	0.0003	0.0000	intron
rs781403787	X:15592989	G	C	0.0005	0.0000	intron
rs185622388	X:15592833	G	A	0.0003	0.0000	intron
rs149434207	X:15592814	C	T	0.0037	0.0000	intron
rs138940089	X:15592789	C	T	0.0013	0.0000	intron
rs192474956	X:15592788	A	G	0.0011	0.0052	intron
rs186905240	X:15592656	A	T	0.0016	0.0000	intron
rs182287132	X:15592604	C	A	0.0005	0.0000	intron

rs190406475	X:15592510	G	A	0.0003	0.0013	intron
rs772676728	X:15592472	C	T	0.0003	0.0000	intron
rs771660825	X:15592393	A	G	0.0003	0.0000	intron
rs761603000	X:15592367	C	T	0.0005	0.0026	intron
rs774374307	X:15592314	G	A	0.0003	0.0000	intron
rs768265294	X:15592297	T	C	0.0003	0.0000	intron
rs749106568	X:15592249	C	T	0.0005	0.0000	intron
rs147312210	X:15592193	A	C	0.0011	0.0000	intron
rs770138535	X:15592114	C	G	0.0011	0.0000	intron
rs746137008	X:15592102	A	T	0.0003	0.0013	intron
rs781113731	X:15592071	A	T	0.0011	0.0000	intron
rs757380652	X:15592049	C	G	0.0019	0.0092	intron
rs747435024	X:15592043	C	T	0.0016	0.0000	intron
rs778349205	X:15591971	G	A	0.0003	0.0000	intron
rs758705920	X:15591891	GC	G	0.0003	0.0000	intron
rs753054398	X:15591890	G	A	0.0003	0.0013	intron
rs765628814	X:15591874	A	G	0.0005	0.0000	intron
rs755740476	X:15591855	G	T	0.0003	0.0000	intron
rs750111952	X:15591835	C	A	0.0005	0.0026	intron
rs187991938	X:15591773	C	G	0.0048	0.0000	intron
rs761387838	X:15591749	A	G	0.0003	0.0013	intron
rs183156483	X:15591721	G	A	0.0003	0.0000	intron
rs4646165	X:15591720	C	T	0.0225	0.0000	intron
rs4646192	X:15591662	C	T	0.0019	0.0000	intron
rs747127882	X:15591618	G	C	0.0003	0.0000	intron
rs200973492	X:15591568	A	G	0.0003	0.0000	missense
rs140473595	X:15591530	C	T	0.0003	0.0013	missense
rs748701949	X:15591522	C	T	0.0003	0.0000	synonymous
rs779199005	X:15591503	A	G	0.0003	0.0000	missense
rs202137736	X:15591485	T	C	0.0005	0.0026	splice region; intron
rs749973631	X:15591427	G	A	0.0003	0.0013	intron
rs191640680	X:15591281	C	T	0.0003	0.0000	intron
rs756915242	X:15591279	A	G	0.0003	0.0000	intron
rs751079438	X:15591242	A	G	0.0003	0.0000	intron
rs763740658	X:15591206	C	G	0.0005	0.0026	intron
rs72614595	X:15591045	C	T	0.0005	0.0013	intron
rs200885467	X:15591032	T	TA	0.0050	0.0000	intron
rs4646166	X:15590910	C	T	0.0032	0.0000	intron
rs759381200	X:15590826	T	A	0.0005	0.0000	intron
rs879922	X:15590807	C	G	0.6824	0.9634	intron
rs181964653	X:15590795	G	A	0.0003	0.0013	intron
rs760844510	X:15590783	C	T	0.0003	0.0000	intron
rs190870013	X:15590737	T	C	0.0003	0.0000	intron

rs772160527	X:15590733	C	T	0.0003	0.0000	intron
rs748614034	X:15590700	A	T	0.0003	0.0000	intron
rs779393092	X:15590643	A	G	0.0005	0.0000	intron
rs768948617	X:15590562	A	T	0.0003	0.0000	intron
rs749647929	X:15590533	G	A	0.0003	0.0000	intron
rs372629764	X:15590482	G	C	0.0003	0.0000	intron
rs756905974	X:15590351	T	C	0.0003	0.0000	missense
rs146750287	X:15590231	T	G	0.0016	0.0000	intron
rs2301693	X:15590192	G	A	0.0652	0.0327	intron
rs758013776	X:15590146	A	G	0.0013	0.0000	intron
rs141025655	X:15590138	C	T	0.0019	0.0000	intron
rs2301692	X:15590120	T	C	0.0652	0.0327	intron
rs759451334	X:15590086	T	C	0.0032	0.0000	intron
rs753635557	X:15590075	C	T	0.0005	0.0000	intron
rs185220883	X:15590068	C	A	0.0008	0.0000	intron
rs180864908	X:15590061	A	G	0.0034	0.0000	intron
rs540248863	X:15590009	T	G	0.0050	0.0000	intron
rs4646167	X:15589978	C	T	0.0225	0.0000	intron
rs761890539	X:15589972	T	C	0.0003	0.0000	intron
rs774469453	X:15589925	CA	C	0.0087	0.0092	splice region; intron
rs769144932	X:15589737	G	C	0.0003	0.0013	intron
rs4646168	X:15589725	C	G	0.0318	0.0000	intron
rs4646169	X:15589702	G	A	0.0048	0.0000	intron
rs142060377	X:15589680	G	A	0.0011	0.0000	intron
rs148805807	X:15589658	G	T	0.0103	0.0000	intron
rs4646170	X:15589621	A	C	0.0270	0.0000	intron
rs375635972	X:15589586	C	T	0.0003	0.0000	intron
rs752245504	X:15589426	TATA	T	0.0003	0.0000	intron
rs778635690	X:15589369	T	A	0.0003	0.0000	intron
rs572887507	X:15589357	T	C	0.0008	0.0000	intron
rs753737983	X:15589201	A	G	0.0003	0.0000	intron
rs766154106	X:15589190	A	G	0.0003	0.0000	intron
rs144061872	X:15589185	C	T	0.0013	0.0000	intron
rs140083333	X:15589061	G	A	0.0003	0.0000	intron
rs767712906	X:15589060	C	T	0.0003	0.0000	intron
rs4646171	X:15589028	T	C	0.0702	0.0327	intron
rs774381971	X:15588998	G	GA	0.0180	0.0000	intron
rs764130657	X:15588628	C	G	0.0005	0.0026	intron
rs763469720	X:15588602	C	T	0.0008	0.0000	intron
rs775893662	X:15588580	A	G	0.0005	0.0000	intron
rs571548731	X:15588555	A	C	0.0008	0.0000	intron
rs746252177	X:15588551	A	C	0.0003	0.0000	intron
rs189283596	X:15588400	A	C	0.0003	0.0000	intron

rs184874220	X:15588354	T	A	0.0003	0.0013	intron
rs181161610	X:15588322	T	C	0.0005	0.0026	intron
rs4646173	X:15588310	C	A	0.0048	0.0000	intron
rs4646174	X:15588271	C	G	0.6832	0.9634	intron
rs749178280	X:15588200	A	T	0.0003	0.0000	intron
rs779868934	X:15588189	T	C	0.0016	0.0000	intron
rs150200247	X:15588150	G	A	0.0005	0.0026	intron
rs750213033	X:15588048	A	T	0.0003	0.0000	intron
rs190133379	X:15588020	G	T	0.0003	0.0000	intron
rs4646175	X:15587979	T	C	0.0162	0.0000	intron
rs751803335	X:15587941	C	T	0.0011	0.0000	intron
rs764195208	X:15587908	T	G	0.0003	0.0000	intron
rs185202584	X:15587859	T	C	0.0019	0.0000	intron
rs776011727	X:15587853	T	G	0.0003	0.0000	intron
rs765652768	X:15587802	G	GT	0.0008	0.0000	intron
rs760190616	X:15587718	C	T	0.0003	0.0000	intron
rs4646176	X:15587504	C	G	0.0694	0.0327	intron
rs771442365	X:15587464	G	A	0.0003	0.0000	intron
rs747760054	X:15587380	T	G	0.0003	0.0000	intron
rs4646177	X:15587324	G	T	0.0164	0.0000	intron
rs192692847	X:15587310	A	C	0.0005	0.0026	intron
rs748733336	X:15587255	A	C	0.0005	0.0000	intron
rs779680438	X:15587232	GTTAT	G	0.0011	0.0000	intron
rs187860487	X:15587148	G	A	0.0003	0.0000	intron
rs184756568	X:15587105	C	T	0.0003	0.0000	intron
rs191513620	X:15587098	A	C	0.0003	0.0000	intron
rs757077008	X:15587056	G	A	0.0011	0.0000	intron
rs4240157	X:15586964	C	T	0.6821	0.9634	intron
rs777875504	X:15586897	A	C	0.0000	0.0000	intron
rs758708751	X:15586549	T	G	0.0003	0.0013	intron
rs1514280	X:15586448	A	G	0.8021	0.9961	intron
rs187738069	X:15586418	T	A	0.0003	0.0000	intron
rs760068320	X:15586271	T	A	0.0003	0.0000	intron
rs754424565	X:15586177	A	G	0.0005	0.0000	intron
rs766780343	X:15586132	C	T	0.0021	0.0000	intron
rs61433707	X:15585987	C	T	0.0058	0.0131	intron
rs183135788	X:15585933	T	C	0.0005	0.0026	missense
rs199951323	X:15585879	A	C	0.0003	0.0013	stop gained
rs145502291	X:15585739	G	T	0.0005	0.0000	intron
rs373723722	X:15585686	C	T	0.0016	0.0079	intron
rs769318556	X:15585602	G	A	0.0013	0.0000	intron
rs191332175	X:15585517	A	G	0.0024	0.0000	intron
rs149683072	X:15585430	A	C	0.0016	0.0000	intron
rs770655876	X:15585413	A	C	0.0003	0.0013	intron

rs746771045	X:15585368	C	T	0.0003	0.0000	intron
rs758521626	X:15585097	T	A	0.0003	0.0000	intron
rs188556473	X:15585021	C	T	0.0003	0.0000	intron
rs182847340	X:15584978	A	G	0.0003	0.0000	intron
rs755110410	X:15584941	G	C	0.0005	0.0000	intron
rs754334903	X:15584905	ACGT	A	0.0003	0.0013	intron
rs766975792	X:15584860	C	CCA	0.0003	0.0000	intron
rs761331737	X:15584825	T	C	0.0003	0.0013	intron
rs750721934	X:15584822	T	C	0.0003	0.0013	intron
rs767972418	X:15584734	A	G	0.0003	0.0000	intron
rs762461812	X:15584727	T	C	0.0003	0.0000	intron
rs4646178	X:15584701	A	G	0.0167	0.0000	intron
rs769228793	X:15584653	AC	A	0.0003	0.0013	intron
rs759061390	X:15584645	C	CA	0.0019	0.0000	intron
rs554672586	X:15584598	G	C	0.0005	0.0000	intron
rs770854266	X:15584503	A	G	0.0003	0.0000	intron
rs200180615	X:15584488	C	T	0.0005	0.0013	missense
rs777410473	X:15584425	T	C	0.0003	0.0000	missense
rs4646179	X:15584420	A	G	0.0225	0.0000	synonymous
rs149039346	X:15584416	A	G	0.0013	0.0000	missense
rs536749578	X:15584367	A	G	0.0008	0.0000	intron
rs755304668	X:15584318	T	C	0.0003	0.0000	intron
rs749374316	X:15584310	CA	C	0.0003	0.0000	intron
rs4646180	X:15584288	C	T	0.0167	0.0000	intron
rs4646181	X:15584189	C	T	0.0056	0.0000	intron
rs750960561	X:15584166	C	T	0.0003	0.0000	intron
rs4646182	X:15584104	T	C	0.0265	0.0000	intron
rs4646183	X:15584047	T	C	0.0005	0.0000	intron
rs752234003	X:15584045	T	C	0.0003	0.0000	intron
rs714205	X:15583904	C	G	0.3083	0.5353	intron
rs190327760	X:15583875	C	T	0.0003	0.0000	intron
rs776092872	X:15583856	A	T	0.0003	0.0000	intron
rs186277162	X:15583852	T	C	0.0008	0.0039	intron
rs4646184	X:15583789	G	A	0.0265	0.0000	intron
rs773202415	X:15583727	C	A	0.0005	0.0026	intron
rs771703212	X:15583715	C	G	0.0003	0.0013	intron
rs181799530	X:15583693	A	T	0.0013	0.0000	intron
rs190850356	X:15583643	G	A	0.0003	0.0000	intron
rs768968453	X:15583618	G	A	0.0003	0.0013	intron
rs749570544	X:15583577	G	A	0.0005	0.0000	intron
rs780230661	X:15583541	G	A	0.0003	0.0000	intron
rs4646185	X:15583484	C	T	0.0048	0.0000	intron
rs186029035	X:15583406	G	A	0.0005	0.0000	intron
rs781729959	X:15583322	C	T	0.0003	0.0000	intron

rs201489317	X:15583285	GAA	G	0.0085	0.0419	intron
rs181390351	X:15583256	C	T	0.0003	0.0013	intron
rs764486802	X:15583051	C	T	0.0005	0.0000	intron
rs754605528	X:15583050	A	G	0.0003	0.0013	intron
rs753514899	X:15583006	C	T	0.0003	0.0000	intron
rs557131427	X:15582978	T	C	0.0008	0.0000	intron
rs233575	X:15582966	G	A	0.8633	0.9961	intron
rs772652271	X:15582901	G	A	0.0003	0.0000	intron
rs767481358	X:15582900	G	A	0.0005	0.0013	intron
rs4646186	X:15582857	G	A	0.0220	0.0000	intron
rs774266501	X:15582831	T	C	0.0003	0.0000	intron
rs2074192	X:15582790	C	T	0.3632	0.4280	intron
rs1514281	X:15582786	T	C	0.1094	0.0327	intron
rs1514282	X:15582763	T	C	0.1118	0.0327	intron
rs1514283	X:15582747	T	C	0.1094	0.0327	intron
rs745948137	X:15582664	T	C	0.0003	0.0000	intron
rs781197701	X:15582614	C	A	0.0731	0.0393	intron
rs233574	X:15582609	T	C	0.8424	0.9961	intron
rs188959000	X:15582572	G	T	0.0024	0.0000	intron
rs778065797	X:15582562	C	T	0.0003	0.0000	intron
rs758795908	X:15582522	G	A	0.0003	0.0000	intron
rs753427319	X:15582448	T	C	0.0003	0.0000	intron
rs779741411	X:15582396	G	C	0.0003	0.0013	intron
rs41303171	X:15582298	T	C	0.0045	0.0000	missense
rs147311723	X:15582265	G	A	0.0048	0.0000	missense
rs35803318	X:15582209	C	T	0.0209	0.0000	synonymous
rs761793505	X:15582016	G	T	0.0005	0.0000	intron
rs193237066	X:15582004	G	A	0.0003	0.0000	intron
rs189278377	X:15581963	G	A	0.0005	0.0000	intron
rs184453641	X:15581797	T	A	0.0013	0.0000	intron
rs775485512	X:15581748	C	T	0.0003	0.0000	intron
rs770051805	X:15581725	C	G	0.0013	0.0000	intron
rs759718900	X:15581671	AAC	A	0.0003	0.0000	intron
rs776754157	X:15581664	T	TCAAA	0.0021	0.0000	intron
rs770940662	X:15581652	C	A	0.0005	0.0000	intron
rs747477556	X:15581537	AC	A	0.0005	0.0000	intron
rs778262471	X:15581376	G	A	0.0003	0.0000	intron
rs772623235	X:15581350	C	T	0.0003	0.0013	intron
rs748503639	X:15581308	C	A	0.0003	0.0000	intron
rs779181213	X:15581180	A	G	0.0005	0.0000	intron
rs192781231	X:15580906	G	C	0.0026	0.0000	intron
rs750065285	X:15580887	G	C	0.0008	0.0039	intron
rs780711379	X:15580830	ACTG TGT	A	0.0005	0.0000	intron

rs756830803	X:15580796	T	TTATA TATAT ATATA	0.0003	0.0000	intron
rs751485431	X:15580728	A	T	0.0005	0.0000	intron
rs764115323	X:15580586	A	T	0.0069	0.0000	intron
rs763050528	X:15580555	T	C	0.0003	0.0000	intron
rs752506379	X:15580531	C	A	0.0013	0.0000	intron
rs143079256	X:15580422	C	T	0.0117	0.0000	intron
rs188290800	X:15580390	T	C	0.0003	0.0000	intron
rs776751449	X:15580292	C	T	0.0003	0.0013	intron
rs770934080	X:15579866	A	C	0.0008	0.0000	3 prime UTR
rs760727332	X:15579784	C	T	0.0005	0.0000	3 prime UTR
rs773344501	X:15579722	C	T	0.0003	0.0000	3 prime UTR
rs772533310	X:15579703	A	C	0.0003	0.0000	3 prime UTR
rs748699772	X:15579613	C	T	0.0003	0.0000	3 prime UTR
rs774727707	X:15579598	C	T	0.0003	0.0000	3 prime UTR
rs142017934	X:15579577	T	C	0.0034	0.0000	3 prime UTR
rs745456925	X:15579551	A	G	0.0003	0.0000	3 prime UTR
rs780720987	X:15579545	C	T	0.0003	0.0013	3 prime UTR
rs757029414	X:15579421	T	C	0.0003	0.0000	3 prime UTR
rs182366225	X:15579294	C	T	0.0037	0.0183	3 prime UTR
rs777465746	X:15579207	T	C	0.0003	0.0000	3 prime UTR