

**PON-P2 predictions for jobID: 623185155**

Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P20936 C540Y	0.991	0.006	Pathogenic	
P20936 I401V	0.439	0.135	Unknown	
P20936 K400E	0.898	0.058	Pathogenic	
P20936 R398L	0.914	0.038	Pathogenic	
P10643 G379R	0.714	0.089	Unknown	
P10643 R220Q	0.185	0.126	Unknown	
P10643 R521S	0.705	0.052	Unknown	
P10643 R687H	0.121	0.044	Neutral	
P10643 C475Y	0.721	0.073	Unknown	
P10643 C63W	0.586	0.103	Unknown	
O75398 A545V	0.233	0.070	Unknown	
O75398 E186V	0.442	0.053	Unknown	
O75398 E202D	0.576	0.054	Unknown	
O75398 E356H	0.837	0.038	Pathogenic	
O75398 E449K	0.464	0.083	Unknown	
O75398 E498K	0.445	0.101	Unknown	
O75398 H479L	0.386	0.073	Unknown	
O75398 K191I	0.651	0.063	Unknown	
O75398 K191N	0.452	0.066	Unknown	
O75398 Q367H	0.277	0.063	Unknown	
O75398 Q468H	0.536	0.072	Unknown	
O75398 Q542H	0.566	0.073	Unknown	
O75398 R218K	0.502	0.068	Unknown	
O75398 R530L	0.790	0.070	Unknown	
O75398 S364N	0.457	0.070	Unknown	
O75398 T526N	0.735	0.057	Unknown	
O75398 V370L	0.489	0.088	Unknown	
O75398 V442A	0.143	0.037	Neutral	
O75398 Y397F	0.185	0.046	Neutral	
Q12809 A558P	0.641	0.099	Unknown	
Q12809 A561T	0.829	0.051	Pathogenic	
Q12809 A561V	0.780	0.053	Pathogenic	
Q12809 A78P	0.563	0.064	Unknown	
Q12809 C66G	0.523	0.068	Unknown	
P19447 F99S	0.913	0.047	Pathogenic	
P19447 T119P	0.794	0.108	Unknown	
Q14003 F448L	0.794	0.050	Pathogenic	
Q14003 R420H	0.674	0.092	Unknown	
P22888 A373V	0.667	0.102	Unknown	
P22888 A568V	0.683	0.100	Unknown	
P22888 A572V	0.667	0.117	Unknown	
P22888 A593P	0.834	0.075	Unknown	
P22888 C131R	0.831	0.039	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P22888 C343S	0.921	0.027	Pathogenic	
P22888 C543R	0.962	0.020	Pathogenic	
P22888 C581R	0.943	0.035	Pathogenic	
P22888 D564G	0.939	0.023	Pathogenic	
P22888 D578E	0.668	0.110	Unknown	
P22888 D578G	0.930	0.026	Pathogenic	
P22888 D578Y	0.915	0.035	Pathogenic	
P22888 E354K	0.896	0.041	Pathogenic	
P22888 I542L	0.494	0.080	Unknown	
P22888 I575L	0.797	0.066	Pathogenic	
P22888 I625K	0.804	0.058	Pathogenic	
P22888 L457R	0.977	0.012	Pathogenic	
P22888 M398T	0.948	0.020	Pathogenic	
P22888 M571I	0.876	0.034	Pathogenic	
P22888 S616Y	0.938	0.024	Pathogenic	
P22888 T577I	0.834	0.063	Pathogenic	
P38398 A1641P	0.300	0.072	Unknown	
P38398 A1708E	0.775	0.048	Pathogenic	
P38398 C1697R	0.796	0.048	Pathogenic	
P38398 C61G	0.784	0.043	Pathogenic	
P38398 C64G	0.780	0.042	Pathogenic	
P38398 D749Y	0.561	0.064	Unknown	
P38398 E10K	0.608	0.070	Unknown	
P38398 E1210G	0.343	0.066	Unknown	
P38398 E227K	0.475	0.067	Unknown	
P38398 E23K	0.787	0.044	Pathogenic	
P38398 F1226L	0.408	0.090	Unknown	
P38398 F461L	0.872	0.028	Pathogenic	
P38398 G552V	0.464	0.068	Unknown	
P38398 G960D	0.511	0.067	Unknown	
P38398 H835Y	0.397	0.080	Unknown	
P38398 H888Y	0.398	0.090	Unknown	
P38398 K1207N	0.313	0.063	Unknown	
P38398 K1690Q	0.783	0.048	Pathogenic	
P38398 L1786P	0.797	0.055	Pathogenic	
P38398 L22S	0.733	0.045	Pathogenic	
P38398 L892S	0.410	0.053	Unknown	
P38398 M1411T	0.895	0.037	Pathogenic	
P38398 M1628T	0.362	0.073	Unknown	
P38398 M1775R	0.810	0.049	Pathogenic	
P38398 P1150S	0.399	0.063	Unknown	
P38398 P1749R	0.766	0.058	Pathogenic	
P38398 P1776S	0.375	0.074	Unknown	
P38398 P1812S	0.709	0.086	Unknown	
P38398 P346S	0.232	0.059	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P38398 Q1200H	0.280	0.067	Unknown	
P38398 R1204I	0.394	0.078	Unknown	
P38398 R1243G	0.301	0.060	Unknown	
P38398 R1699W	0.789	0.044	Pathogenic	
P38398 R841W	0.331	0.073	Unknown	
P38398 R866Q	0.378	0.073	Unknown	
P38398 S1139I	0.329	0.060	Unknown	
P38398 S1187I	0.351	0.089	Unknown	
P38398 S1217Y	0.487	0.076	Unknown	
P38398 S1297P	0.625	0.063	Unknown	
P38398 T1025I	0.412	0.110	Unknown	
P38398 T826K	0.418	0.070	Unknown	
P38398 V1047A	0.414	0.093	Unknown	
P38398 V271M	0.427	0.066	Unknown	
P38398 Y465D	0.888	0.032	Pathogenic	
P38398 Y856H	0.472	0.068	Unknown	
O43918 A21V	0.588	0.109	Unknown	
O43918 C311Y	0.958	0.018	Pathogenic	
O43918 C446G	0.569	0.062	Unknown	
O43918 E298K	0.722	0.071	Unknown	
O43918 F77S	0.838	0.069	Pathogenic	
O43918 G228W	0.631	0.065	Unknown	
O43918 K83E	0.492	0.129	Unknown	
O43918 L28P	0.884	0.037	Pathogenic	
O43918 L29P	0.894	0.030	Pathogenic	
O43918 L93R	0.958	0.018	Pathogenic	
O43918 L97P	0.858	0.049	Pathogenic	
O43918 M1V	1.000	0.000	Pathogenic	
O43918 P252L	0.076	0.038	Neutral	
O43918 P326L	0.913	0.040	Pathogenic	
O43918 P326Q	0.609	0.116	Unknown	
O43918 P539L	0.890	0.043	Pathogenic	
O43918 R15C	0.933	0.024	Pathogenic	
O43918 R15L	0.851	0.044	Pathogenic	
O43918 R303P	0.824	0.039	Pathogenic	
O43918 R8C	0.929	0.029	Pathogenic	
O43918 R92W	0.727	0.066	Unknown	
O43918 T16M	0.851	0.038	Pathogenic	
O43918 V301M	0.400	0.088	Unknown	
O43918 W78R	0.890	0.039	Pathogenic	
O43918 V80G	0.558	0.105	Unknown	
O43918 V80L	0.389	0.072	Unknown	
O43918 Y85C	0.848	0.054	Pathogenic	
O43918 Y90C	0.970	0.017	Pathogenic	
Q03431 H223R	0.703	0.071	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q03431 I458R	0.940	0.021	Pathogenic	
Q03431 P132L	0.840	0.083	Unknown	
Q03431 R150C	0.314	0.077	Unknown	
Q03431 T410P	0.681	0.099	Unknown	
Q03431 T410R	0.955	0.021	Pathogenic	
Q96L73 C1674W	0.850	0.104	Unknown	
Q96L73 C1925R	0.915	0.037	Pathogenic	
Q96L73 C2183S	0.830	0.063	Pathogenic	
Q96L73 G1792V	0.912	0.052	Pathogenic	
Q96L73 G1955D	0.888	0.067	Pathogenic	
Q96L73 H1616L	0.797	0.046	Pathogenic	
Q96L73 H2143Q	0.824	0.049	Pathogenic	
Q96L73 I1687N	0.594	0.117	Unknown	
Q96L73 L1637P	0.938	0.023	Pathogenic	
Q96L73 R1984Q	0.810	0.080	Unknown	
Q96L73 R2005Q	0.832	0.075	Unknown	
Q96L73 R2017Q	0.832	0.075	Unknown	
Q96L73 R2017W	0.960	0.022	Pathogenic	
Q96L73 Y1997C	0.805	0.045	Pathogenic	
Q13563 A356P	0.775	0.051	Pathogenic	
Q13563 W414G	0.793	0.056	Pathogenic	
P47804 S66R	0.816	0.049	Pathogenic	
Q9Y620 D418Y	0.741	0.066	Unknown	
Q9Y620 N593S	0.757	0.097	Unknown	
P04275 H817Q	0.673	0.055	Unknown	
P04275 A1437T	0.829	0.081	Unknown	
P04275 A1461D	0.778	0.056	Pathogenic	
P04275 A2801D	0.837	0.044	Pathogenic	
P04275 C1071F	0.895	0.049	Pathogenic	
P04275 C1130F	0.835	0.082	Unknown	
P04275 C1149R	0.985	0.009	Pathogenic	
P04275 C1272G	0.863	0.039	Pathogenic	
P04275 C1272S	0.828	0.051	Pathogenic	
P04275 C1458Y	0.983	0.010	Pathogenic	
P04275 C2174G	0.960	0.017	Pathogenic	
P04275 C2671Y	0.966	0.020	Pathogenic	
P04275 C2754W	0.816	0.075	Unknown	
P04275 C275S	0.943	0.028	Pathogenic	
P04275 C2804Y	0.973	0.017	Pathogenic	
P04275 C570S	0.936	0.030	Pathogenic	
P04275 C623W	0.825	0.108	Unknown	
P04275 C788R	0.978	0.015	Pathogenic	
P04275 C804F	0.898	0.051	Pathogenic	
P04275 C858F	0.806	0.054	Pathogenic	
P04275 D1302G	0.073	0.030	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P04275 D141N	0.875	0.043	Pathogenic	
P04275 D141Y	0.920	0.028	Pathogenic	
P04275 D1614G	0.567	0.097	Unknown	
P04275 D47H	0.900	0.071	Pathogenic	
P04275 D879N	0.714	0.119	Unknown	
P04275 E1359K	0.881	0.081	Pathogenic	
P04275 E1447Q	0.199	0.055	Neutral	
P04275 E787K	0.948	0.029	Pathogenic	
P04275 F1369I	0.581	0.102	Unknown	
P04275 G1324A	0.518	0.105	Unknown	
P04275 G1505E	0.915	0.036	Pathogenic	
P04275 G1505R	0.913	0.031	Pathogenic	
P04275 G1579R	0.827	0.110	Unknown	
P04275 G1629R	0.485	0.089	Unknown	
P04275 G785E	0.986	0.010	Pathogenic	
P04275 H1268N	0.283	0.062	Unknown	
P04275 I1309V	0.409	0.061	Unknown	
P04275 I1425F	0.528	0.136	Unknown	
P04275 I427N	0.742	0.125	Unknown	
P04275 K1362T	0.765	0.063	Unknown	
P04275 L1276P	0.866	0.060	Pathogenic	
P04275 L1282R	0.659	0.088	Unknown	
P04275 L1296P	0.871	0.061	Pathogenic	
P04275 L1383P	0.977	0.012	Pathogenic	
P04275 L1503P	0.858	0.061	Pathogenic	
P04275 L1562P	0.882	0.044	Pathogenic	
P04275 L1580P	0.771	0.062	Unknown	
P04275 L1580V	0.076	0.031	Neutral	
P04275 L1639P	0.959	0.022	Pathogenic	
P04275 M800V	0.074	0.029	Neutral	
P04275 N1231T	0.343	0.057	Unknown	
P04275 P1266Q	0.296	0.074	Unknown	
P04275 P1337L	0.339	0.067	Unknown	
P04275 P1467S	0.191	0.048	Neutral	
P04275 P1824H	0.770	0.092	Unknown	
P04275 P2776L	0.751	0.056	Pathogenic	
P04275 P2781S	0.536	0.069	Unknown	
P04275 P812L	0.516	0.117	Unknown	
P04275 Q1053H	0.657	0.069	Unknown	
P04275 Q1556R	0.286	0.078	Unknown	
P04275 R1205H	0.444	0.081	Unknown	
P04275 R1306L	0.323	0.069	Unknown	
P04275 R1306Q	0.103	0.043	Neutral	
P04275 R1308H	0.117	0.035	Neutral	
P04275 R1308P	0.765	0.048	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P04275 R1315C	0.892	0.073	Pathogenic	
P04275 R1341L	0.385	0.089	Unknown	
P04275 R1341P	0.803	0.056	Pathogenic	
P04275 R1341W	0.700	0.070	Unknown	
P04275 R1583W	0.349	0.070	Unknown	
P04275 R1597L	0.407	0.084	Unknown	
P04275 R782W	0.657	0.070	Unknown	
P04275 R816Q	0.881	0.072	Pathogenic	
P04275 S1285F	0.731	0.082	Unknown	
P04275 S1310F	0.597	0.075	Unknown	
P04275 S1506L	0.786	0.065	Unknown	
P04275 S1543F	0.588	0.088	Unknown	
P04275 S2179F	0.645	0.066	Unknown	
P04275 S85P	0.739	0.077	Unknown	
P04275 T1156M	0.878	0.048	Pathogenic	
P04275 V1229G	0.070	0.022	Neutral	
P04275 V1279I	0.255	0.065	Unknown	
P04275 V1314D	0.854	0.041	Pathogenic	
P04275 V1314F	0.762	0.049	Pathogenic	
P04275 V1539E	0.751	0.057	Unknown	
P04275 V1604F	0.677	0.058	Unknown	
P04275 Y795C	0.666	0.078	Unknown	
P02461 G1011E	0.906	0.050	Pathogenic	
P02461 G1014E	0.909	0.054	Pathogenic	
P02461 G1032V	0.860	0.048	Pathogenic	
P02461 G1035C	0.804	0.058	Pathogenic	
P02461 G1044D	0.912	0.035	Pathogenic	
P02461 G1050V	0.882	0.046	Pathogenic	
P02461 G1071V	0.634	0.148	Unknown	
P02461 G1077V	0.637	0.094	Unknown	
P02461 G1089D	0.837	0.050	Pathogenic	
P02461 G1098V	0.784	0.053	Pathogenic	
P02461 G1101E	0.754	0.045	Pathogenic	
P02461 G1104A	0.471	0.081	Unknown	
P02461 G924C	0.749	0.083	Unknown	
P02461 G936S	0.846	0.042	Pathogenic	
P02461 G939D	0.916	0.035	Pathogenic	
P02461 G942E	0.902	0.052	Pathogenic	
P02461 G957S	0.860	0.038	Pathogenic	
P02461 G960V	0.701	0.061	Unknown	
P02461 G966V	0.776	0.051	Pathogenic	
P02461 G972A	0.476	0.080	Unknown	
P02461 G984T	0.885	0.035	Pathogenic	
P02461 G996E	0.901	0.049	Pathogenic	
P02461 G999R	0.826	0.077	Unknown	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q9Y3Q4 S672R	0.622	0.088	Unknown	
P54132 C1036F	0.890	0.058	Pathogenic	
P54132 C1055S	0.909	0.045	Pathogenic	
P54132 C1066Y	0.973	0.016	Pathogenic	
P54132 C878R	0.960	0.018	Pathogenic	
P54132 C901Y	0.968	0.019	Pathogenic	
P54132 D1064V	0.981	0.011	Pathogenic	
P54132 G891E	0.927	0.046	Pathogenic	
P54132 G952V	0.882	0.062	Pathogenic	
P54132 H963Y	0.872	0.045	Pathogenic	
P54132 I841T	0.909	0.035	Pathogenic	
P54132 Q672R	0.862	0.042	Pathogenic	
P54132 T843I	0.829	0.049	Pathogenic	
O60938 N247S	0.857	0.054	Pathogenic	
O60938 T215K	0.802	0.056	Pathogenic	
O60260 A46P	0.622	0.102	Unknown	
O60260 A82E	0.092	0.028	Neutral	
O60260 A92V	0.088	0.030	Neutral	
O60260 C212Y	0.766	0.064	Unknown	
O60260 C253Y	0.909	0.033	Pathogenic	
O60260 C289G	0.864	0.040	Pathogenic	
O60260 C431F	0.662	0.082	Unknown	
O60260 C441R	0.818	0.047	Pathogenic	
O60260 D280N	0.292	0.062	Unknown	
O60260 G284R	0.955	0.021	Pathogenic	
O60260 G328E	0.753	0.066	Unknown	
O60260 G430D	0.908	0.030	Pathogenic	
O60260 K161N	0.645	0.071	Unknown	
O60260 K211N	0.361	0.060	Unknown	
O60260 K211R	0.210	0.046	Neutral	
O60260 M192V	0.184	0.045	Neutral	
O60260 P37L	0.383	0.066	Unknown	
O60260 P437L	0.434	0.073	Unknown	
O60260 R256C	0.878	0.042	Pathogenic	
O60260 R275W	0.759	0.092	Unknown	
O60260 R334C	0.353	0.073	Unknown	
O60260 R33Q	0.169	0.043	Neutral	
O60260 R42P	0.766	0.061	Unknown	
O60260 T240M	0.414	0.092	Unknown	
O60260 T240R	0.583	0.074	Unknown	
O60260 T351P	0.348	0.069	Unknown	
O60260 T415N	0.673	0.075	Unknown	
O60260 V15M	0.551	0.067	Unknown	
Q14999 H1464P	0.544	0.091	Unknown	
Q14999 L1014R	0.844	0.054	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q14999 Q1246G	0.623	0.069	Unknown	
P51787 A178P	0.669	0.084	Unknown	
P51787 A178T	0.693	0.063	Unknown	
P51787 A194P	0.638	0.083	Unknown	
P51787 A300T	0.826	0.041	Pathogenic	INTRAMEM
P51787 A341E	0.816	0.050	Pathogenic	
P51787 A341V	0.828	0.045	Pathogenic	
P51787 A344V	0.827	0.045	Pathogenic	
P51787 A371T	0.484	0.092	Unknown	
P51787 A525T	0.793	0.048	Pathogenic	
P51787 D242N	0.612	0.064	Unknown	
P51787 D317N	0.886	0.067	Pathogenic	INTRAMEM
P51787 E160K	0.863	0.041	Pathogenic	
P51787 E261D	0.673	0.070	Unknown	
P51787 E261K	0.868	0.039	Pathogenic	
P51787 F157C	0.676	0.065	Unknown	
P51787 G168R	0.644	0.071	Unknown	
P51787 G179S	0.846	0.041	Pathogenic	
P51787 G189R	0.793	0.080	Unknown	
P51787 G216R	0.775	0.082	Unknown	
P51787 G269D	0.872	0.049	Pathogenic	
P51787 G269S	0.832	0.047	Pathogenic	
P51787 G306R	0.989	0.088	Pathogenic	INTRAMEM
P51787 G314S	0.827	0.043	Pathogenic	INTRAMEM
P51787 G325R	0.784	0.071	Unknown	
P51787 G345E	0.662	0.069	Unknown	
P51787 G345R	0.680	0.081	Unknown	
P51787 G589D	0.611	0.068	Unknown	
P51787 I313M	0.808	0.049	Pathogenic	INTRAMEM
P51787 K318N	0.964	0.047	Pathogenic	INTRAMEM
P51787 L250H	0.836	0.056	Pathogenic	
P51787 L266P	0.807	0.108	Unknown	
P51787 L273F	0.792	0.049	Pathogenic	
P51787 L342F	0.786	0.053	Pathogenic	
P51787 L353P	0.827	0.042	Pathogenic	
P51787 P320A	0.981	0.066	Pathogenic	INTRAMEM
P51787 P448R	0.124	0.032	Neutral	
P51787 R174C	0.836	0.059	Pathogenic	
P51787 R174H	0.839	0.043	Pathogenic	
P51787 R190Q	0.823	0.042	Pathogenic	
P51787 R243C	0.845	0.059	Pathogenic	
P51787 R243H	0.817	0.047	Pathogenic	
P51787 R366P	0.692	0.054	Unknown	
P51787 R366Q	0.355	0.073	Unknown	
P51787 R366W	0.602	0.080	Unknown	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P51787 R533W	0.690	0.088	Unknown	
P51787 R539W	0.882	0.042	Pathogenic	
P51787 R555C	0.799	0.081	Unknown	
P51787 R583C	0.612	0.062	Unknown	
P51787 R591H	0.459	0.069	Unknown	
P51787 R594Q	0.650	0.073	Unknown	
P51787 S140G	0.600	0.055	Unknown	
P51787 S225L	0.780	0.064	Unknown	
P51787 S349W	0.614	0.091	Unknown	
P51787 S373P	0.461	0.072	Unknown	
P51787 S566F	0.597	0.066	Unknown	
P51787 T309R	0.883	0.035	Pathogenic	INTRAMEM
P51787 T311I	0.829	0.049	Pathogenic	INTRAMEM
P51787 T312I	0.845	0.046	Pathogenic	INTRAMEM
P51787 T391I	0.425	0.058	Unknown	
P51787 T587M	0.434	0.066	Unknown	
P51787 W248R	0.854	0.043	Pathogenic	
P51787 V254M	0.773	0.056	Pathogenic	
P51787 W305S	0.825	0.053	Pathogenic	INTRAMEM
P51787 V307L	0.987	0.069	Pathogenic	INTRAMEM
P51787 V310I	0.281	0.060	Unknown	INTRAMEM
P51787 W392R	0.645	0.076	Unknown	
P51787 V417M	0.101	0.029	Neutral	
P51787 Y111C	0.377	0.067	Unknown	
P51787 Y184S	0.625	0.094	Unknown	
P51787 Y281C	0.823	0.054	Pathogenic	
P51787 Y315C	0.856	0.043	Pathogenic	INTRAMEM
P51787 Y315S	0.982	0.096	Pathogenic	INTRAMEM
P05164 A332V	0.556	0.088	Unknown	
P05164 D371G	0.474	0.078	Unknown	
P05164 G501S	0.693	0.065	Unknown	
P05164 L572W	0.835	0.058	Pathogenic	
P05164 M251T	0.178	0.046	Neutral	
P05164 R499C	0.647	0.079	Unknown	
P05164 R569W	0.839	0.087	Unknown	
P05164 W643R	0.901	0.038	Pathogenic	
P05164 Y173C	0.878	0.042	Pathogenic	
Q9GZT9 P317R	0.849	0.056	Pathogenic	
Q9NZC9 A468P	0.717	0.068	Unknown	
Q9NZC9 F279S	0.903	0.051	Pathogenic	
Q9NZC9 F702V	0.608	0.065	Unknown	
Q9NZC9 H379P	0.779	0.060	Pathogenic	
Q9NZC9 I548N	0.724	0.082	Unknown	
Q9NZC9 I755S	0.870	0.061	Pathogenic	
Q9NZC9 I821S	0.946	0.021	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q9NZC9 K647Q	0.966	0.020	Pathogenic	
Q9NZC9 K647T	0.878	0.042	Pathogenic	
Q9NZC9 M1I	1.000	0.000	Pathogenic	
Q9NZC9 P480L	0.987	0.009	Pathogenic	
Q9NZC9 R476Q	0.383	0.088	Unknown	
Q9NZC9 R561C	0.973	0.018	Pathogenic	
Q9NZC9 R561H	0.983	0.012	Pathogenic	
Q9NZC9 R586W	0.892	0.086	Pathogenic	
Q9NZC9 R644W	0.963	0.027	Pathogenic	
Q9NZC9 R645C	0.979	0.015	Pathogenic	
Q9NZC9 R645H	0.982	0.013	Pathogenic	
Q9NZC9 R764Q	0.987	0.010	Pathogenic	
Q9NZC9 R820H	0.975	0.014	Pathogenic	
Q9NZC9 S579L	0.897	0.055	Pathogenic	
Q9NZC9 T705I	0.958	0.021	Pathogenic	
P08581 D1228N	0.874	0.040	Pathogenic	
P08581 H1094L	0.876	0.042	Pathogenic	
P08581 H1094R	0.945	0.027	Pathogenic	
P08581 H1094Y	0.926	0.029	Pathogenic	
P08581 H1106D	0.822	0.073	Unknown	
P08581 K1244R	0.897	0.042	Pathogenic	
P08581 M1131T	0.939	0.029	Pathogenic	
P08581 M1250I	0.837	0.046	Pathogenic	
P08581 P773L	0.572	0.060	Unknown	
P08581 P991S	0.930	0.028	Pathogenic	
P08581 T1173I	0.545	0.073	Unknown	
P08581 V1092I	0.780	0.058	Pathogenic	
P08581 V1188L	0.898	0.040	Pathogenic	
P08581 V1220I	0.785	0.060	Pathogenic	
P08581 Y1230C	0.920	0.035	Pathogenic	
P08581 Y1230D	0.910	0.032	Pathogenic	
P21359 A1785S	0.786	0.045	Pathogenic	
P21359 A74D	0.689	0.065	Unknown	
P21359 C324R	0.932	0.025	Pathogenic	
P21359 C93Y	0.818	0.047	Pathogenic	
P21359 D176E	0.575	0.069	Unknown	
P21359 D186V	0.935	0.022	Pathogenic	
P21359 D2012N	0.918	0.030	Pathogenic	
P21359 D338G	0.808	0.041	Pathogenic	
P21359 E2357K	0.938	0.024	Pathogenic	
P21359 E337V	0.896	0.031	Pathogenic	
P21359 F1193C	0.973	0.012	Pathogenic	
P21359 G1166D	0.919	0.037	Pathogenic	
P21359 G2001R	0.976	0.014	Pathogenic	
P21359 G629R	0.676	0.049	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P21359 G848E	0.962	0.017	Pathogenic	
P21359 H31R	0.931	0.026	Pathogenic	
P21359 H712R	0.936	0.028	Pathogenic	
P21359 H781P	0.757	0.049	Pathogenic	
P21359 I117S	0.957	0.019	Pathogenic	
P21359 I157N	0.922	0.034	Pathogenic	
P21359 I1605V	0.480	0.060	Unknown	
P21359 I581T	0.941	0.028	Pathogenic	
P21359 K1430E	0.876	0.037	Pathogenic	
P21359 K1440Q	0.915	0.022	Pathogenic	
P21359 K1440R	0.733	0.063	Unknown	
P21359 K1444E	0.907	0.036	Pathogenic	
P21359 K1444N	0.725	0.084	Unknown	
P21359 K1444R	0.729	0.108	Unknown	
P21359 K583R	0.433	0.069	Unknown	
P21359 L1147P	0.979	0.012	Pathogenic	
P21359 L1196R	0.971	0.013	Pathogenic	
P21359 L1243P	0.971	0.013	Pathogenic	
P21359 L1446P	0.963	0.028	Pathogenic	
P21359 L145P	0.971	0.017	Pathogenic	
P21359 L194R	0.875	0.036	Pathogenic	
P21359 L1953P	0.971	0.013	Pathogenic	
P21359 L2088P	0.981	0.010	Pathogenic	
P21359 L2164M	0.860	0.047	Pathogenic	
P21359 L216P	0.969	0.017	Pathogenic	
P21359 L357P	0.981	0.012	Pathogenic	
P21359 L508P	0.979	0.012	Pathogenic	
P21359 L532P	0.957	0.025	Pathogenic	
P21359 L549P	0.971	0.013	Pathogenic	
P21359 L578R	0.983	0.010	Pathogenic	
P21359 L604V	0.912	0.040	Pathogenic	
P21359 L695P	0.971	0.013	Pathogenic	
P21359 L763P	0.849	0.042	Pathogenic	
P21359 L844F	0.881	0.046	Pathogenic	
P21359 L844P	0.979	0.012	Pathogenic	
P21359 L844R	0.976	0.012	Pathogenic	
P21359 L847P	0.979	0.012	Pathogenic	
P21359 L898P	0.971	0.013	Pathogenic	
P21359 L920P	0.959	0.025	Pathogenic	
P21359 M1035R	0.950	0.020	Pathogenic	
P21359 M1073V	0.952	0.022	Pathogenic	
P21359 M968R	0.950	0.020	Pathogenic	
P21359 N1156S	0.941	0.030	Pathogenic	
P21359 N1451T	0.811	0.049	Pathogenic	
P21359 P2221A	0.770	0.075	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P21359 R1204G	0.925	0.031	Pathogenic	
P21359 R1204W	0.942	0.025	Pathogenic	
P21359 R1250P	0.933	0.023	Pathogenic	
P21359 R1276G	0.935	0.031	Pathogenic	
P21359 R1276P	0.977	0.012	Pathogenic	
P21359 R1276Q	0.961	0.017	Pathogenic	
P21359 R1412S	0.951	0.024	Pathogenic	
P21359 R1611W	0.958	0.023	Pathogenic	
P21359 R873C	0.945	0.022	Pathogenic	
P21359 S1489G	0.805	0.043	Pathogenic	
P21359 S574R	0.869	0.055	Pathogenic	
P21359 S665F	0.560	0.064	Unknown	
P21359 S82F	0.823	0.054	Pathogenic	
P21359 T2507I	0.509	0.131	Unknown	
P21359 T2631A	0.938	0.025	Pathogenic	
P21359 T780K	0.892	0.043	Pathogenic	
P21359 V1453L	0.896	0.043	Pathogenic	
P21359 W1952R	0.912	0.033	Pathogenic	
P21359 W777S	0.922	0.022	Pathogenic	
P21359 W784C	0.955	0.016	Pathogenic	
P21359 W784R	0.912	0.033	Pathogenic	
P21359 Y2192N	0.890	0.030	Pathogenic	
P21359 Y489C	0.963	0.016	Pathogenic	
P21359 Y491C	0.486	0.067	Unknown	
Q76LX8 R268P	0.441	0.119	Unknown	
P02748 C119G	0.968	0.013	Pathogenic	
P16157 V463I	0.252	0.059	Unknown	
P35499 A1152D	0.704	0.062	Unknown	
P35499 A1156T	0.410	0.066	Unknown	
P35499 G1456E	0.647	0.074	Unknown	
P35499 I1160V	0.383	0.091	Unknown	
P35499 L1433R	0.569	0.065	Unknown	
P35499 M1592V	0.573	0.068	Unknown	
P35499 P1158S	0.665	0.064	Unknown	
P35499 R1448C	0.408	0.081	Unknown	
P35499 R1448H	0.474	0.114	Unknown	
P35499 R669H	0.423	0.071	Unknown	
P35499 R672G	0.470	0.080	Unknown	
P35499 R672H	0.430	0.092	Unknown	
P35499 R675G	0.455	0.068	Unknown	
P35499 R675Q	0.558	0.085	Unknown	
P35499 R675W	0.644	0.092	Unknown	
P35499 S804F	0.500	0.077	Unknown	
P35499 T1313M	0.402	0.082	Unknown	
P35499 T704M	0.681	0.085	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P35499 V1293I	0.319	0.082	Unknown	
P35499 V1442E	0.478	0.069	Unknown	
P35499 V1589M	0.646	0.074	Unknown	
P35499 V445M	0.723	0.080	Unknown	
P27918 G298V	0.978	0.014	Pathogenic	
P27918 Q343R	0.532	0.127	Unknown	
P27918 R100W	0.980	0.013	Pathogenic	
P27918 R346C	0.898	0.054	Pathogenic	
P27918 W321G	0.902	0.063	Pathogenic	
P27918 W321S	0.880	0.048	Pathogenic	
P27918 Y414D	0.782	0.058	Pathogenic	
Q13751 G199A	0.090	0.026	Neutral	
Q13751 K207Q	0.277	0.058	Unknown	
Q13751 P679L	0.115	0.040	Neutral	
Q12791 D434G	0.759	0.059	Unknown	
P30556 T282M	0.969	0.017	Pathogenic	
P17813 A160D	0.877	0.031	Pathogenic	
P17813 C412S	0.904	0.030	Pathogenic	
P17813 C53R	0.872	0.036	Pathogenic	
P17813 G413V	0.894	0.040	Pathogenic	
P17813 G52V	0.954	0.022	Pathogenic	
P17813 I263T	0.813	0.046	Pathogenic	
P17813 L107R	0.636	0.063	Unknown	
P17813 L221P	0.718	0.049	Unknown	
P17813 L306P	0.825	0.043	Pathogenic	
P17813 L8P	0.204	0.054	Neutral	
P17813 S615L	0.502	0.061	Unknown	
P17813 W149C	0.654	0.072	Unknown	
P17813 V49F	0.833	0.041	Pathogenic	
P17813 V504M	0.359	0.060	Unknown	
Q99490 A651V	0.470	0.067	Unknown	
Q99490 E767V	0.567	0.080	Unknown	
Q99490 R518G	0.623	0.061	Unknown	
Q99490 V455A	0.695	0.060	Unknown	
P55268 C321R	0.924	0.032	Pathogenic	
P55268 L1393F	0.395	0.068	Unknown	
P55268 N1380K	0.677	0.060	Unknown	
P55268 R246Q	0.821	0.070	Pathogenic	
P55268 R246W	0.927	0.031	Pathogenic	
Q8TDN2 A259V	0.908	0.039	Pathogenic	
Q8TDN2 G459D	0.960	0.022	Pathogenic	INTRAMEM
Q8TDN2 L126Q	0.911	0.032	Pathogenic	
Q8TDN2 S256W	0.956	0.017	Pathogenic	
Q8TDN2 W188C	0.983	0.011	Pathogenic	
Q92847 A204E	0.978	0.013	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P98161 A2752D	0.898	0.037	Pathogenic	
P98161 D3815N	0.908	0.031	Pathogenic	
P98161 E2771K	0.892	0.039	Pathogenic	
P98161 F3066L	0.363	0.077	Unknown	
P98161 G1166S	0.235	0.074	Unknown	
P98161 G2814R	0.635	0.066	Unknown	
P98161 G2858S	0.859	0.041	Pathogenic	
P98161 G3560R	0.881	0.045	Pathogenic	
P98161 G4032D	0.568	0.070	Unknown	
P98161 H2638R	0.209	0.048	Neutral	
P98161 H2921P	0.803	0.077	Unknown	
P98161 I2826T	0.783	0.052	Pathogenic	
P98161 L2696R	0.119	0.037	Neutral	
P98161 L2763V	0.580	0.093	Unknown	
P98161 L2816P	0.785	0.092	Unknown	
P98161 L2993P	0.797	0.141	Unknown	
P98161 L3511V	0.154	0.042	Neutral	
P98161 L3852P	0.626	0.082	Unknown	
P98161 L845S	0.859	0.045	Pathogenic	
P98161 M3678T	0.928	0.030	Pathogenic	
P98161 P2471L	0.738	0.146	Unknown	
P98161 Q2519L	0.316	0.070	Unknown	
P98161 Q3016R	0.848	0.046	Pathogenic	
P98161 Q4225P	0.661	0.067	Unknown	
P98161 R2329W	0.900	0.042	Pathogenic	
P98161 R2392P	0.594	0.073	Unknown	
P98161 R2408C	0.869	0.041	Pathogenic	
P98161 R2791Q	0.341	0.062	Unknown	
P98161 R2985G	0.115	0.027	Neutral	
P98161 R3039C	0.496	0.075	Unknown	
P98161 R3247H	0.822	0.055	Pathogenic	
P98161 R324L	0.526	0.071	Unknown	
P98161 R3753W	0.889	0.039	Pathogenic	
P98161 R4136G	0.859	0.047	Pathogenic	
P98161 R4154C	0.894	0.050	Pathogenic	
P98161 R4276W	0.259	0.075	Unknown	
P98161 S2423F	0.767	0.100	Unknown	
P98161 S75F	0.788	0.080	Unknown	
P98161 T2250M	0.752	0.066	Unknown	
P98161 T2649I	0.401	0.062	Unknown	
P98161 T3382M	0.457	0.067	Unknown	
P98161 T3510M	0.126	0.046	Neutral	
P98161 W139C	0.479	0.068	Unknown	
P98161 V1956E	0.892	0.044	Pathogenic	
P98161 V2768M	0.721	0.162	Unknown	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P98161 V3008L	0.781	0.085	Unknown	
P98161 V3285I	0.236	0.057	Neutral	
P98161 V3375M	0.255	0.047	Neutral	
P98161 W967R	0.897	0.036	Pathogenic	
P98161 Y2336D	0.891	0.037	Pathogenic	
P14770 A156T	0.148	0.046	Neutral	
P14770 C113Y	0.840	0.072	Pathogenic	
P14770 C24R	0.791	0.058	Pathogenic	
P14770 D37G	0.306	0.058	Unknown	
P14770 F71S	0.470	0.072	Unknown	
P14770 L56P	0.894	0.054	Pathogenic	
P14770 L7P	0.519	0.071	Unknown	
P14770 N61S	0.418	0.115	Unknown	
Q8WXD0 T222P	0.360	0.083	Unknown	
O75800 R407Q	0.279	0.060	Unknown	
Q8NFJ6 L173R	0.163	0.043	Neutral	
Q8NFJ6 M323I	0.201	0.043	Neutral	
Q8NFJ6 P290S	0.210	0.057	Neutral	
Q8NFJ6 Q210R	0.258	0.059	Unknown	
Q8NFJ6 R164Q	0.201	0.058	Neutral	
Q8NFJ6 R85H	0.499	0.107	Unknown	
Q8NFJ6 W178S	0.230	0.059	Neutral	
O15553 E148Q	0.174	0.046	Neutral	
O15553 L110P	0.079	0.028	Neutral	
O15553 A744S	0.022	0.012	Neutral	
O15553 D661N	0.182	0.044	Neutral	
O15553 E148V	0.215	0.054	Neutral	
O15553 E163A	0.192	0.051	Neutral	
O15553 E167D	0.258	0.076	Unknown	
O15553 E230K	0.043	0.021	Neutral	
O15553 E319K	0.108	0.040	Neutral	
O15553 E474K	0.164	0.047	Neutral	
O15553 E656A	0.397	0.082	Unknown	
O15553 F479L	0.046	0.027	Neutral	
O15553 F743L	0.273	0.064	Unknown	
O15553 G632S	0.056	0.027	Neutral	
O15553 G678E	0.310	0.094	Unknown	
O15553 H478Y	0.184	0.055	Neutral	
O15553 I591T	0.138	0.045	Neutral	
O15553 I640M	0.049	0.018	Neutral	
O15553 I641F	0.043	0.019	Neutral	
O15553 I720M	0.500	0.072	Unknown	
O15553 K695M	0.326	0.069	Unknown	
O15553 K695R	0.132	0.040	Neutral	
O15553 L649P	0.477	0.101	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
O15553 M680I	0.077	0.025	Neutral	
O15553 M680L	0.154	0.042	Neutral	
O15553 M694I	0.121	0.035	Neutral	SITE
O15553 R42W	0.384	0.085	Unknown	
O15553 R653H	0.016	0.009	Neutral	
O15553 R761H	0.059	0.029	Neutral	
O15553 S108R	0.098	0.032	Neutral	
O15553 S675N	0.150	0.037	Neutral	
O15553 T177I	0.042	0.018	Neutral	
O15553 T267I	0.057	0.024	Neutral	
O15553 T681I	0.069	0.033	Neutral	
O15553 V704I	0.018	0.010	Neutral	
O15553 V726A	0.069	0.038	Neutral	
O15553 Y688C	0.656	0.068	Unknown	
O43525 D305G	0.989	0.063	Pathogenic	INTRAMEM
O43525 G310V	0.893	0.039	Pathogenic	INTRAMEM
O43525 W309R	0.919	0.029	Pathogenic	INTRAMEM
O43526 A306T	0.394	0.133	Unknown	
O43526 H228Q	0.765	0.054	Pathogenic	
O43526 K554N	0.471	0.084	Unknown	
O43526 L243F	0.400	0.065	Unknown	
O43526 M208V	0.881	0.043	Pathogenic	
O43526 R207W	0.919	0.028	Pathogenic	
O43526 R214W	0.953	0.023	Pathogenic	
O43526 R333Q	0.694	0.100	Unknown	
O43526 S247W	0.502	0.071	Unknown	
O43526 Y284C	0.984	0.057	Pathogenic	INTRAMEM
Q6W2J9 P85L	0.502	0.067	Unknown	
Q9Y5Y6 G827R	0.565	0.064	Unknown	SITE
Q5S007 G2019S	0.893	0.039	Pathogenic	
Q5S007 I1122V	0.523	0.064	Unknown	
Q5S007 I1371V	0.635	0.056	Unknown	
Q5S007 I2012T	0.820	0.056	Pathogenic	
Q5S007 I2020T	0.937	0.027	Pathogenic	
Q5S007 M1869T	0.750	0.048	Pathogenic	
Q5S007 P1542S	0.831	0.046	Pathogenic	
Q5S007 Q930R	0.391	0.062	Unknown	
Q5S007 R1067Q	0.863	0.067	Pathogenic	
Q5S007 R1441G	0.865	0.041	Pathogenic	
Q5S007 R1441H	0.770	0.052	Pathogenic	
Q5S007 R1514Q	0.597	0.081	Unknown	
Q5S007 R1941H	0.507	0.102	Unknown	
Q5S007 R793M	0.869	0.039	Pathogenic	
Q5S007 S1096C	0.527	0.128	Unknown	
Q5S007 S1228T	0.626	0.084	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q5S007 T2356I	0.439	0.100	Unknown	
Q5S007 V1598E	0.884	0.039	Pathogenic	
Q5S007 Y1699C	0.966	0.019	Pathogenic	
Q969F8 C223R	0.926	0.028	Pathogenic	
Q969F8 L102P	0.824	0.050	Pathogenic	
Q969F8 L148S	0.740	0.053	Pathogenic	
Q969F8 R297L	0.633	0.073	Unknown	
Q969F8 R386P	0.177	0.062	Neutral	
Q9H3S1 D345H	0.464	0.077	Unknown	
Q9H3S1 F350C	0.895	0.035	Pathogenic	
Q08289 S535L	0.469	0.079	Unknown	
Q9Y283 L493S	0.932	0.029	Pathogenic	
Q9Y283 P482R	0.858	0.048	Pathogenic	
Q495M9 L48P	0.791	0.058	Pathogenic	
P16473 A553T	0.475	0.082	Unknown	
P16473 A623I	0.450	0.063	Unknown	
P16473 A623V	0.495	0.083	Unknown	
P16473 A647V	0.279	0.052	Unknown	
P16473 C390W	0.516	0.065	Unknown	
P16473 C41S	0.183	0.053	Neutral	
P16473 C600R	0.647	0.061	Unknown	
P16473 C672Y	0.607	0.058	Unknown	
P16473 D219E	0.075	0.029	Neutral	
P16473 D410N	0.501	0.095	Unknown	
P16473 D619G	0.408	0.064	Unknown	
P16473 D633A	0.281	0.058	Unknown	
P16473 D633E	0.187	0.048	Neutral	
P16473 D633H	0.363	0.075	Unknown	
P16473 D633Y	0.393	0.064	Unknown	
P16473 F197I	0.505	0.065	Unknown	
P16473 F525L	0.244	0.055	Neutral	
P16473 F631C	0.612	0.059	Unknown	
P16473 F631L	0.339	0.078	Unknown	
P16473 G431S	0.453	0.082	Unknown	
P16473 G498S	0.307	0.072	Unknown	
P16473 I167N	0.414	0.071	Unknown	
P16473 I486F	0.425	0.072	Unknown	
P16473 I486M	0.302	0.057	Unknown	
P16473 I568T	0.567	0.064	Unknown	
P16473 I630L	0.215	0.058	Neutral	
P16473 K183R	0.116	0.031	Neutral	
P16473 K723M	0.238	0.057	Neutral	
P16473 L252P	0.597	0.078	Unknown	
P16473 L467P	0.641	0.056	Unknown	
P16473 L512R	0.663	0.056	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P16473 L629F	0.256	0.069	Unknown	
P16473 L677V	0.106	0.038	Neutral	
P16473 M453T	0.595	0.062	Unknown	
P16473 M463V	0.232	0.066	Unknown	
P16473 N650Y	0.417	0.071	Unknown	
P16473 N670S	0.284	0.057	Unknown	
P16473 N715D	0.206	0.048	Neutral	
P16473 P162A	0.363	0.050	Unknown	
P16473 P639S	0.314	0.067	Unknown	
P16473 R109Q	0.584	0.057	Unknown	
P16473 R310C	0.335	0.055	Unknown	
P16473 R450H	0.528	0.078	Unknown	
P16473 S281I	0.608	0.058	Unknown	
P16473 S281N	0.496	0.065	Unknown	
P16473 S281T	0.365	0.085	Unknown	
P16473 S505N	0.442	0.058	Unknown	
P16473 S505R	0.410	0.068	Unknown	
P16473 T477I	0.365	0.073	Unknown	
P16473 T632A	0.187	0.047	Neutral	
P16473 T632I	0.368	0.075	Unknown	
P16473 V509A	0.488	0.075	Unknown	
P16473 V597F	0.462	0.068	Unknown	
P16473 V597L	0.260	0.056	Unknown	
Q9Y653 C346S	0.720	0.062	Unknown	
Q9Y653 C91S	0.782	0.047	Pathogenic	
Q9Y653 R38W	0.703	0.075	Unknown	
Q9Y653 Y88C	0.813	0.056	Pathogenic	
Q99972 A445V	0.144	0.055	Neutral	
Q99972 C433R	0.511	0.083	Unknown	
Q99972 D208E	0.007	0.006	Neutral	
Q99972 D380A	0.358	0.075	Unknown	
Q99972 D380G	0.368	0.078	Unknown	
Q99972 E352K	0.149	0.046	Neutral	
Q99972 G246R	0.388	0.100	Unknown	
Q99972 G364V	0.430	0.086	Unknown	
Q99972 G367R	0.426	0.096	Unknown	
Q99972 I465M	0.223	0.067	Unknown	
Q99972 I477N	0.076	0.025	Neutral	
Q99972 I477S	0.077	0.022	Neutral	
Q99972 I499F	0.119	0.033	Neutral	
Q99972 K423E	0.408	0.091	Unknown	
Q99972 N480K	0.245	0.059	Unknown	
Q99972 P361S	0.239	0.057	Neutral	
Q99972 P370L	0.321	0.079	Unknown	
Q99972 P481L	0.261	0.065	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q99972 P481T	0.191	0.044	Neutral	
Q99972 Q337R	0.208	0.066	Unknown	
Q99972 R422H	0.214	0.049	Neutral	
Q99972 R470C	0.134	0.041	Neutral	
Q99972 R82C	0.085	0.026	Neutral	
Q99972 S393R	0.281	0.053	Unknown	
Q99972 S502P	0.071	0.024	Neutral	
Q99972 T293K	0.057	0.018	Neutral	
Q99972 T353I	0.150	0.074	Neutral	
Q99972 T377M	0.198	0.060	Neutral	
Q99972 W286R	0.358	0.105	Unknown	
Q99972 V426F	0.342	0.085	Unknown	
Q99972 V53A	0.130	0.037	Neutral	
Q99972 Y437H	0.418	0.089	Unknown	
Q5VV43 A311T	0.028	0.014	Neutral	
P07911 C126R	0.937	0.024	Pathogenic	
P07911 C148Y	0.932	0.027	Pathogenic	
P07911 C217R	0.938	0.021	Pathogenic	
P07911 C223Y	0.953	0.017	Pathogenic	
P07911 C248W	0.861	0.044	Pathogenic	
P07911 C255Y	0.745	0.072	Unknown	
P07911 C300G	0.824	0.045	Pathogenic	
P07911 C315R	0.927	0.023	Pathogenic	
P07911 C77Y	0.947	0.017	Pathogenic	
P07911 G103C	0.570	0.075	Unknown	
P07911 N128S	0.835	0.048	Pathogenic	
P07911 T225K	0.709	0.063	Unknown	
P02458 G453V	0.434	0.068	Unknown	
P02458 G492V	0.931	0.027	Pathogenic	
P02458 G504S	0.870	0.050	Pathogenic	
P02458 G510D	0.944	0.032	Pathogenic	
P02458 G513S	0.469	0.081	Unknown	
P02458 R565C	0.896	0.047	Pathogenic	
P24530 A183G	0.462	0.110	Unknown	
P24530 M374I	0.908	0.036	Pathogenic	
P24530 P383L	0.960	0.021	Pathogenic	
P24530 S305N	0.581	0.061	Unknown	
Q9GZU5 A143P	0.076	0.023	Neutral	
Q9GZU5 A187K	0.042	0.015	Neutral	
Q9GZU5 F298S	0.172	0.058	Neutral	
Q9GZU5 G370V	0.198	0.051	Neutral	
Q9GZU5 L184P	0.459	0.108	Unknown	
Q9GZU5 L213Q	0.267	0.076	Unknown	
Q9GZU5 L232P	0.226	0.073	Unknown	
Q9GZU5 L285P	0.505	0.115	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q9GZU5 L307P	0.496	0.113	Unknown	
Q9GZU5 L347P	0.459	0.108	Unknown	
Q9GZU5 N216S	0.300	0.064	Unknown	
Q9GZU5 N264K	0.301	0.074	Unknown	
Q9GZU5 N312S	0.306	0.068	Unknown	
Q9GZU5 P151L	0.200	0.046	Neutral	
Q9GZU5 P175R	0.359	0.073	Unknown	
Q9GZU1 D362Y	0.827	0.081	Unknown	
Q9GZU1 F465L	0.801	0.093	Unknown	
Q9GZU1 L106P	0.968	0.016	Pathogenic	
Q9GZU1 L447P	0.976	0.016	Pathogenic	
Q9GZU1 R403C	0.960	0.020	Pathogenic	
Q9GZU1 T232P	0.839	0.052	Pathogenic	
Q9GZU1 V446L	0.934	0.034	Pathogenic	
P08123 G1012S	0.831	0.040	Pathogenic	
P08123 G1066D	0.972	0.015	Pathogenic	
P08123 G1078C	0.927	0.038	Pathogenic	
P08123 G1096A	0.765	0.065	Unknown	
P08123 G1102R	0.952	0.024	Pathogenic	
P08123 G949S	0.799	0.138	Unknown	
P08123 G955S	0.846	0.047	Pathogenic	
P08123 G973V	0.667	0.079	Unknown	
P08123 G997D	0.971	0.016	Pathogenic	
P08123 T1148P	0.611	0.108	Unknown	
P13224 A133P	0.136	0.041	Neutral	
P13224 Y113C	0.650	0.063	Unknown	
P49917 G469E	0.897	0.027	Pathogenic	
P49917 H282L	0.913	0.026	Pathogenic	
P49917 M249V	0.832	0.059	Pathogenic	
P49917 Q280R	0.892	0.035	Pathogenic	
P49917 R278H	0.924	0.032	Pathogenic	BINDING
P08100 A164E	0.966	0.017	Pathogenic	
P08100 A164V	0.922	0.045	Pathogenic	
P08100 A292E	0.541	0.062	Unknown	
P08100 C110F	0.965	0.016	Pathogenic	
P08100 C110Y	0.989	0.007	Pathogenic	
P08100 C140S	0.950	0.028	Pathogenic	
P08100 C167R	0.969	0.015	Pathogenic	
P08100 C222R	0.987	0.008	Pathogenic	
P08100 D190G	0.906	0.043	Pathogenic	
P08100 D190N	0.951	0.023	Pathogenic	
P08100 D190Y	0.724	0.188	Unknown	
P08100 E150K	0.982	0.011	Pathogenic	
P08100 E181K	0.904	0.047	Pathogenic	
P08100 F220C	0.931	0.023	Pathogenic	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P08100 F45L	0.905	0.039	Pathogenic	
P08100 G106R	0.937	0.033	Pathogenic	
P08100 G106W	0.849	0.059	Pathogenic	
P08100 G109R	0.960	0.022	Pathogenic	
P08100 G114D	0.961	0.031	Pathogenic	
P08100 G182S	0.974	0.016	Pathogenic	
P08100 G188E	0.969	0.017	Pathogenic	
P08100 G188R	0.953	0.030	Pathogenic	
P08100 G51R	0.991	0.008	Pathogenic	
P08100 G51V	0.983	0.012	Pathogenic	
P08100 G89D	0.474	0.081	Unknown	
P08100 G90D	0.914	0.041	Pathogenic	
P08100 H211P	0.962	0.021	Pathogenic	
P08100 H211R	0.990	0.007	Pathogenic	
P08100 K296E	0.983	0.128	Pathogenic	BINDING,TRANSMEM
P08100 L125R	0.968	0.022	Pathogenic	
P08100 L131P	0.944	0.024	Pathogenic	
P08100 L40R	0.981	0.014	Pathogenic	
P08100 L46R	0.734	0.060	Unknown	
P08100 M207R	0.960	0.019	Pathogenic	
P08100 M216K	0.564	0.095	Unknown	
P08100 M44T	0.992	0.006	Pathogenic	
P08100 N15S	0.744	0.112	Unknown	
P08100 P171L	0.986	0.009	Pathogenic	
P08100 P171Q	0.937	0.038	Pathogenic	
P08100 P171S	0.957	0.024	Pathogenic	
P08100 P23H	0.948	0.030	Pathogenic	
P08100 P23L	0.982	0.012	Pathogenic	
P08100 P267L	0.971	0.018	Pathogenic	
P08100 P267R	0.975	0.015	Pathogenic	
P08100 P347A	0.443	0.062	Unknown	
P08100 P347L	0.589	0.080	Unknown	
P08100 P347Q	0.658	0.060	Unknown	
P08100 P347R	0.754	0.064	Unknown	
P08100 P347S	0.580	0.081	Unknown	
P08100 P53R	0.985	0.011	Pathogenic	
P08100 Q28H	0.855	0.060	Pathogenic	
P08100 R135G	0.956	0.023	Pathogenic	
P08100 R135L	0.967	0.017	Pathogenic	
P08100 R135W	0.930	0.042	Pathogenic	
P08100 S127F	0.719	0.067	Unknown	
P08100 S186P	0.914	0.033	Pathogenic	
P08100 S297R	0.536	0.063	Unknown	
P08100 T17M	0.981	0.011	Pathogenic	
P08100 T342M	0.785	0.060	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P08100 T4K	0.938	0.028	Pathogenic	
P08100 T58R	0.962	0.021	Pathogenic	
P08100 T94I	0.950	0.023	Pathogenic	
P08100 V345L	0.602	0.075	Unknown	
P08100 V345M	0.777	0.082	Unknown	
P08100 V87D	0.949	0.021	Pathogenic	
P08100 Y178C	0.972	0.018	Pathogenic	
P08100 Y178N	0.974	0.014	Pathogenic	
P33076 F962S	0.906	0.036	Pathogenic	
P33076 L469P	0.936	0.020	Pathogenic	
P11678 R286H	0.664	0.091	Unknown	
P30968 A129D	0.851	0.047	Pathogenic	
P30968 A171T	0.687	0.062	Unknown	
P30968 E90K	0.718	0.079	Unknown	
P30968 N10K	0.206	0.048	Neutral	
P30968 Q106R	0.593	0.076	Unknown	
P30968 R139H	0.719	0.067	Unknown	
P30968 R262Q	0.683	0.077	Unknown	
P30968 S168R	0.188	0.049	Neutral	
P30968 S217R	0.422	0.071	Unknown	
P30968 Y284C	0.840	0.060	Pathogenic	
P54098 A1105T	0.811	0.072	Unknown	
P54098 A467T	0.512	0.108	Unknown	
P54098 A889T	0.891	0.047	Pathogenic	
P54098 A957S	0.425	0.070	Unknown	
P54098 G1051R	0.766	0.069	Unknown	
P54098 G1076V	0.816	0.060	Pathogenic	
P54098 G431V	0.732	0.077	Unknown	
P54098 G848S	0.895	0.038	Pathogenic	
P54098 G923D	0.943	0.028	Pathogenic	
P54098 H932Y	0.780	0.095	Unknown	
P54098 L304R	0.945	0.022	Pathogenic	
P54098 N468D	0.178	0.061	Neutral	
P54098 N864S	0.834	0.061	Pathogenic	
P54098 P587L	0.840	0.080	Unknown	
P54098 R1047Q	0.674	0.073	Unknown	
P54098 R1096C	0.950	0.030	Pathogenic	
P54098 R1146C	0.802	0.056	Pathogenic	
P54098 R227W	0.671	0.145	Unknown	
P54098 R309L	0.902	0.040	Pathogenic	
P54098 R3P	0.323	0.085	Unknown	
P54098 R579W	0.617	0.134	Unknown	
P54098 R627W	0.365	0.063	Unknown	
P54098 R943H	0.952	0.023	Pathogenic	
P54098 R953C	0.947	0.026	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P54098 S1104C	0.645	0.076	Unknown	
P54098 S1176L	0.542	0.093	Unknown	
P54098 T251I	0.066	0.028	Neutral	
P54098 V1106I	0.355	0.099	Unknown	
P54098 W312R	0.827	0.046	Pathogenic	
P54098 W748S	0.696	0.079	Unknown	
P54098 Y831C	0.517	0.108	Unknown	
P54098 Y955C	0.940	0.023	Pathogenic	
Q9NRD8 Q36H	0.509	0.093	Unknown	
Q9NRD8 R376W	0.889	0.041	Pathogenic	
P03999 G79R	0.455	0.081	Unknown	
P03999 P264S	0.866	0.074	Pathogenic	
P03999 S214P	0.769	0.062	Unknown	
Q01718 C251F	0.838	0.055	Pathogenic	
Q01718 D103N	0.716	0.090	Unknown	
Q01718 D107N	0.644	0.106	Unknown	
Q01718 R128C	0.944	0.023	Pathogenic	
Q01718 R137W	0.570	0.095	Unknown	
Q01718 R146H	0.878	0.044	Pathogenic	
Q01718 S120R	0.915	0.034	Pathogenic	
Q01718 S74I	0.955	0.018	Pathogenic	
Q01718 Y254C	0.873	0.065	Pathogenic	
O95389 C78R	0.288	0.085	Unknown	
P56696 G285C	0.913	0.029	Pathogenic	INTRAMEM
P56696 G285S	0.983	0.149	Pathogenic	INTRAMEM
P56696 G321S	0.758	0.115	Unknown	
P56696 L274H	0.898	0.033	Pathogenic	INTRAMEM
P56696 L281S	0.890	0.031	Pathogenic	INTRAMEM
P56696 W276S	0.916	0.031	Pathogenic	INTRAMEM
Q9Y210 E897K	0.818	0.064	Pathogenic	
Q9Y210 N143S	0.766	0.097	Unknown	
Q9Y210 P112Q	0.773	0.088	Unknown	
Q9Y210 R895C	0.749	0.060	Unknown	
Q9Y210 S270T	0.585	0.106	Unknown	
Q14191 K125N	0.603	0.073	Unknown	
Q14191 K135E	0.689	0.059	Unknown	
O15455 F303S	0.681	0.061	Unknown	
O15455 P554S	0.859	0.068	Pathogenic	
Q99250 L1003I	0.394	0.090	Unknown	
Q99250 L1330F	0.432	0.085	Unknown	
Q99250 L1563V	0.421	0.078	Unknown	
Q99250 R1319Q	0.672	0.113	Unknown	
Q99250 R223Q	0.686	0.098	Unknown	
Q99250 V892I	0.316	0.104	Unknown	
Q02643 A176V	0.862	0.038	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
Q02643 A222E	0.678	0.081	Unknown	
Q02643 F242C	0.955	0.018	Pathogenic	
Q02643 L144H	0.959	0.019	Pathogenic	
O75443 C1057S	0.452	0.144	Unknown	
O75443 C1619S	0.348	0.102	Unknown	
O75443 G1824D	0.237	0.094	Unknown	
O75443 L1820F	0.138	0.086	Unknown	
O75443 Y1870C	0.321	0.078	Unknown	
Q16281 F547L	0.698	0.085	Unknown	
Q16281 G557R	0.902	0.037	Pathogenic	
Q16281 P163L	0.942	0.028	Pathogenic	
Q16281 R283Q	0.824	0.049	Pathogenic	
Q16281 R283W	0.886	0.040	Pathogenic	
Q16281 R410W	0.576	0.130	Unknown	
Q16281 T291R	0.900	0.040	Pathogenic	
Q16281 V529M	0.751	0.082	Unknown	
NP_000016.1 A38T	0.390	0.066	Unknown	
NP_000016.1 E249K	0.474	0.074	Unknown	
NP_000016.1 R353C	0.983	0.010	Pathogenic	
NP_000016.1 W64R	0.164	0.048	Neutral	
NP_000048.1 F857L	0.917	0.029	Pathogenic	
NP_000048.1 N534S	0.389	0.066	Unknown	
NP_000048.1 P868L	0.971	0.016	Pathogenic	
NP_000048.1 R643H	0.335	0.067	Unknown	
NP_000048.1 T298M	0.735	0.048	Pathogenic	
NP_000056.2 Q567H	0.092	0.040	Neutral	SITE
NP_000060.2 L458H	0.646	0.063	Unknown	
NP_000109.1 G191D	0.785	0.047	Pathogenic	
NP_000151.1 F303C	0.788	0.050	Pathogenic	
NP_000155.1 E354Q	0.703	0.084	Unknown	
NP_000155.1 T232M	0.290	0.072	Unknown	
NP_000208.2 S306P	0.914	0.037	Pathogenic	
NP_000219.2 M1123K	0.335	0.074	Unknown	
NP_000219.2 M852L	0.099	0.030	Neutral	
NP_000219.2 R754G	0.075	0.027	Neutral	
NP_000224.2 I161K	0.761	0.047	Pathogenic	
NP_000224.2 N312S	0.392	0.106	Unknown	
NP_000225.1 R409H	0.335	0.072	Unknown	
NP_000225.1 T614I	0.109	0.051	Neutral	
NP_000229.1 K897T	0.219	0.053	Neutral	
NP_000229.1 R1047L	0.266	0.056	Unknown	
NP_000229.1 T337S	0.335	0.063	Unknown	
NP_000229.1 T367S	0.211	0.053	Neutral	
NP_000234.1 R202Q	0.119	0.047	Neutral	
NP_000236.2 M362T	0.620	0.078	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_000236.2 N375S	0.594	0.074	Unknown	
NP_000258.1 K478T	0.885	0.036	Pathogenic	
NP_000258.1 L2280F	0.848	0.041	Pathogenic	
NP_000258.1 L2690F	0.881	0.046	Pathogenic	
NP_000258.1 P678L	0.689	0.045	Unknown	
NP_000258.1 R2328C	0.914	0.028	Pathogenic	
NP_000258.1 R304Q	0.735	0.065	Unknown	
NP_000258.1 S2502R	0.891	0.041	Pathogenic	
NP_000258.1 Y1401H	0.909	0.025	Pathogenic	
NP_000288.1 F482C	0.695	0.060	Unknown	
NP_000288.1 V569F	0.719	0.076	Unknown	
NP_000307.1 E546K	0.576	0.064	Unknown	
NP_000360.2 E34K	0.117	0.036	Neutral	
NP_000360.2 L439P	0.597	0.057	Unknown	
NP_000360.2 L440P	0.651	0.064	Unknown	
NP_000360.2 N744K	0.063	0.026	Neutral	
NP_000360.2 P52T	0.170	0.051	Neutral	
NP_000417.2 A1654D	0.843	0.063	Pathogenic	
NP_000417.2 C1060F	0.749	0.078	Unknown	
NP_000417.2 H644D	0.394	0.067	Unknown	
NP_000417.2 P3083L	0.356	0.080	Unknown	
NP_000417.2 R1844S	0.256	0.048	Neutral	
NP_000417.2 R2477S	0.561	0.066	Unknown	
NP_000417.2 T2056K	0.040	0.018	Neutral	
NP_000417.2 T2636A	0.243	0.072	Unknown	
NP_000417.2 V2210A	0.771	0.070	Unknown	
NP_000493.1 F76L	0.339	0.063	Unknown	
NP_000493.1 H496Q	0.046	0.016	Neutral	
NP_000493.1 I40M	0.137	0.040	Neutral	
NP_000493.1 K441T	0.163	0.041	Neutral	
NP_000493.1 N572Y	0.509	0.078	Unknown	
NP_000493.1 P358L	0.510	0.087	Unknown	
NP_000538.3 A373S	0.090	0.031	Neutral	
NP_000538.3 L793P	0.567	0.109	Unknown	
NP_000538.3 M706V	0.014	0.009	Neutral	
NP_000538.3 N106K	0.197	0.096	Unknown	
NP_000538.3 R846W	0.119	0.044	Neutral	
NP_000538.3 S398T	0.317	0.064	Unknown	
NP_000538.3 T725P	0.064	0.024	Neutral	
NP_000538.3 V618M	0.427	0.071	Unknown	
NP_000543.2 F2561Y	0.227	0.051	Neutral	
NP_000543.2 P2695R	0.817	0.062	Pathogenic	
NP_000543.2 R2342H	0.194	0.046	Neutral	
NP_000543.2 T1381A	0.038	0.021	Neutral	
NP_000544.2 C1367R	0.390	0.061	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_000544.2 L1074F	0.085	0.031	Neutral	
NP_000544.2 R711W	0.880	0.044	Pathogenic	
NP_000544.2 S1079L	0.311	0.078	Unknown	
NP_000544.2 S394P	0.489	0.080	Unknown	
NP_000544.2 T1262R	0.853	0.040	Pathogenic	
NP_000544.2 V114I	0.169	0.058	Neutral	
NP_000553.1 D458N	0.557	0.075	Unknown	
NP_000553.1 P575L	0.117	0.040	Neutral	
NP_000578.2 K420Q	0.645	0.057	Unknown	
NP_000578.2 R222H	0.170	0.044	Neutral	
NP_000578.2 T587P	0.051	0.020	Neutral	
NP_000578.2 T598S	0.069	0.027	Neutral	
NP_000614.1 G354E	0.459	0.092	Unknown	
NP_000614.1 R14C	0.267	0.060	Unknown	
NP_000625.1 M31R	0.047	0.023	Neutral	
NP_000666.2 L95P	0.884	0.066	Pathogenic	
NP_000672.3 C432F	0.855	0.038	Pathogenic	
NP_000672.3 N266K	0.505	0.056	Unknown	
NP_000673.2 G211A	0.314	0.050	Unknown	
NP_000673.2 V379I	0.471	0.085	Unknown	
NP_000674.2 F184S	0.734	0.061	Unknown	
NP_000674.2 Y402S	0.655	0.107	Unknown	
NP_000675.1 A29T	0.640	0.070	Unknown	
NP_000675.1 S49G	0.267	0.062	Unknown	
NP_000709.1 L1414F	0.707	0.140	Unknown	
NP_000709.1 S446P	0.437	0.085	Unknown	
NP_000711.1 A138S	0.546	0.080	Unknown	
NP_000711.1 Q1908P	0.695	0.088	Unknown	
NP_000711.1 W512G	0.352	0.065	Unknown	
NP_000711.1 V549G	0.602	0.099	Unknown	
NP_000711.1 Y1830C	0.811	0.059	Pathogenic	
NP_000716.2 N149T	0.375	0.073	Unknown	
NP_000716.2 R423H	0.134	0.048	Neutral	
NP_000730.1 V231I	0.271	0.068	Unknown	
NP_000786.1 S311C	0.745	0.045	Pathogenic	
NP_000789.1 A269V	0.854	0.042	Pathogenic	
NP_000789.1 A286V	0.324	0.067	Unknown	
NP_000789.1 F207V	0.215	0.042	Neutral	
NP_000789.1 G110E	0.953	0.019	Pathogenic	
NP_000789.1 P330Q	0.276	0.063	Unknown	
NP_000789.1 R247H	0.890	0.062	Pathogenic	
NP_000789.1 S233N	0.808	0.070	Unknown	
NP_000789.1 V238I	0.813	0.052	Pathogenic	
NP_000814.2 A57T	0.117	0.037	Neutral	
NP_000814.2 E121D	0.416	0.085	Unknown	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_000814.2 I132N	0.865	0.057	Pathogenic	
NP_000814.2 M422T	0.345	0.061	Unknown	
NP_000814.2 V225I	0.406	0.059	Unknown	
NP_000849.1 R96C	0.769	0.083	Unknown	
NP_000855.1 S265L	0.503	0.068	Unknown	
NP_000859.1 C23S	0.170	0.050	Neutral	
NP_000859.1 L4V	0.249	0.052	Neutral	
NP_000868.1 Q125K	0.075	0.025	Neutral	
NP_000868.1 Q253K	0.076	0.024	Neutral	
NP_000901.1 L98F	0.525	0.096	Unknown	
NP_000902.3 C27F	0.057	0.022	Neutral	
NP_000903.2 D374N	0.240	0.049	Neutral	
NP_000944.1 E301A	0.221	0.049	Neutral	
NP_000944.1 G198E	0.858	0.041	Pathogenic	
NP_000944.1 R332Q	0.870	0.048	Pathogenic	
NP_000944.1 R7C	0.742	0.057	Unknown	
NP_000946.2 T223M	0.124	0.033	Neutral	
NP_000947.2 H226P	0.776	0.056	Pathogenic	
NP_000947.2 I223T	0.817	0.056	Pathogenic	
NP_000949.1 L211P	0.926	0.036	Pathogenic	
NP_000951.1 S319W	0.479	0.068	Unknown	
NP_000951.1 V25M	0.755	0.066	Unknown	
NP_000953.2 D449G	0.171	0.038	Neutral	
NP_000953.2 L237M	0.757	0.065	Unknown	
NP_000954.1 G587R	0.545	0.102	Unknown	
NP_001001851.1 R460H	0.064	0.020	Neutral	
NP_001003818.1 L333M	0.080	0.035	Neutral	
NP_001003931.2 A48S	0.310	0.088	Unknown	
NP_001003931.2 P269L	0.652	0.091	Unknown	
NP_001003931.2 Q276R	0.081	0.036	Neutral	
NP_001004749.1 E8K	0.146	0.043	Neutral	
NP_001004749.1 M81T	0.188	0.046	Neutral	
NP_001004758.1 I57N	0.280	0.052	Unknown	
NP_001004759.1 N345S	0.152	0.062	Neutral	
NP_001004759.1 V190L	0.012	0.008	Neutral	
NP_001005169.1 T41I	0.126	0.028	Neutral	
NP_001005170.1 I10V	0.020	0.011	Neutral	
NP_001005170.1 L25P	0.014	0.012	Neutral	
NP_001006600.1 E718Q	0.220	0.051	Neutral	
NP_001006600.1 K746E	0.301	0.055	Unknown	
NP_001006600.1 L229F	0.294	0.058	Unknown	
NP_001006600.1 N1087S	0.217	0.059	Neutral	
NP_001006600.1 N277T	0.536	0.079	Unknown	
NP_001007098.1 T243K	0.835	0.036	Pathogenic	
NP_001008503.2 A6V	0.164	0.043	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_001008503.2 N190K	0.965	0.017	Pathogenic	
NP_001008503.2 S147C	0.869	0.046	Pathogenic	
NP_001010895.1 P429T	0.723	0.047	Pathogenic	
NP_001012985.1 C831R	0.013	0.009	Neutral	
NP_001012985.1 N355K	0.436	0.068	Unknown	
NP_001012985.1 V409L	0.183	0.051	Neutral	
NP_001013648.1 R91T	0.135	0.030	Neutral	
NP_001017403.1 A721E	0.111	0.038	Neutral	
NP_001017403.1 V775M	0.125	0.040	Neutral	
NP_001017523.1 A321P	0.063	0.025	Neutral	
NP_001017523.1 A581T	0.013	0.009	Neutral	
NP_001017523.1 E584K	0.220	0.043	Neutral	
NP_001017523.1 H182P	0.181	0.045	Neutral	
NP_001017523.1 S325N	0.142	0.033	Neutral	
NP_001025186.1 L376V	0.379	0.095	Unknown	
NP_001025186.1 P10L	0.128	0.065	Neutral	
NP_001025186.1 P487L	0.113	0.046	Neutral	
NP_001025186.1 R387H	0.357	0.079	Unknown	
NP_001025186.1 T405I	0.163	0.043	Neutral	
NP_001026872.2 A383G	0.161	0.040	Neutral	
NP_001026872.2 D587E	0.323	0.063	Unknown	
NP_001027567.1 F1157L	0.116	0.049	Neutral	
NP_001027567.1 F1157Y	0.078	0.021	Neutral	
NP_001027567.1 I147N	0.107	0.030	Neutral	
NP_001027567.1 S123G	0.228	0.047	Neutral	
NP_001032406.1 E553V	0.084	0.026	Neutral	
NP_001032406.1 G410V	0.909	0.034	Pathogenic	
NP_001032406.1 R389Q	0.627	0.078	Unknown	
NP_001032406.1 V336G	0.566	0.077	Unknown	
NP_001032961.1 F257S	0.102	0.034	Neutral	
NP_001032961.1 K388N	0.454	0.069	Unknown	
NP_001032961.1 N373S	0.208	0.056	Neutral	
NP_001032961.1 V138M	0.091	0.029	Neutral	
NP_001034706.1 G66A	0.111	0.037	Neutral	
NP_001035362.3 G853R	0.047	0.018	Neutral	
NP_001035362.3 L823I	0.007	0.005	Neutral	
NP_001035362.3 V1265I	0.026	0.016	Neutral	
NP_001035755.1 F17C	0.889	0.037	Pathogenic	
NP_001035755.1 G214E	0.941	0.022	Pathogenic	
NP_001035755.1 R456Q	0.166	0.049	Neutral	
NP_001036040.2 A347V	0.020	0.010	Neutral	
NP_001036040.2 L516F	0.098	0.038	Neutral	
NP_001036040.2 R3P	0.497	0.099	Unknown	
NP_001036040.2 S690C	0.056	0.021	Neutral	
NP_001036040.2 T280I	0.052	0.025	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_001036040.2 V109G	0.119	0.037	Neutral	
NP_001041695.1 V53M	0.905	0.041	Pathogenic	
NP_001043.2 F284V	0.516	0.056	Unknown	
NP_001044.1 A52V	0.190	0.057	Neutral	
NP_001044.1 P109S	0.114	0.035	Neutral	
NP_001044.1 P335L	0.384	0.102	Unknown	
NP_001044.1 T333M	0.148	0.043	Neutral	
NP_001073929.1 K159E	0.039	0.016	Neutral	
NP_001073929.1 Q35E	0.039	0.023	Neutral	
NP_001073929.1 S94N	0.020	0.011	Neutral	
NP_001073933.1 H108Y	0.039	0.016	Neutral	
NP_001073933.1 S344R	0.048	0.018	Neutral	
NP_001073940.1 H84P	0.133	0.037	Neutral	
NP_001073940.1 N1012T	0.172	0.049	Neutral	
NP_001073940.1 N903D	0.014	0.008	Neutral	
NP_001073940.1 R885H	0.042	0.019	Neutral	
NP_001073940.1 S234P	0.011	0.007	Neutral	
NP_001073940.1 S381F	0.067	0.022	Neutral	
NP_001073940.1 S802C	0.092	0.026	Neutral	
NP_001073986.1 R77H	0.018	0.009	Neutral	
NP_001092877.1 S692T	0.018	0.009	Neutral	
NP_001093130.1 D24G	0.285	0.061	Unknown	
NP_001093638.1 A335V	0.130	0.045	Neutral	
NP_001093638.1 L55Q	0.902	0.034	Pathogenic	
NP_001099051.1 N220T	0.099	0.043	Neutral	
NP_001099051.1 N240S	0.111	0.031	Neutral	
NP_001099129.1 H389D	0.063	0.021	Neutral	
NP_001099129.1 S549R	0.011	0.008	Neutral	
NP_001106995.1 L116F	0.234	0.093	Unknown	
NP_001108588.1 H431L	0.010	0.007	Neutral	
NP_001108588.1 L523P	0.226	0.034	Neutral	
NP_001121901.1 A52T	0.213	0.055	Neutral	
NP_001121901.1 N350K	0.345	0.074	Unknown	
NP_001121901.1 S247N	0.190	0.047	Neutral	
NP_001121901.1 T429A	0.387	0.066	Unknown	
NP_001121901.1 V301A	0.112	0.037	Neutral	
NP_001189.2 G74S	0.452	0.094	Unknown	
NP_001258.2 T350I	0.337	0.059	Unknown	
NP_001287.2 A248V	0.325	0.073	Unknown	
NP_001287.2 V41A	0.382	0.069	Unknown	
NP_001287.2 Y373S	0.009	0.006	Neutral	
NP_001289.1 E198K	0.342	0.095	Unknown	
NP_001289.1 R290H	0.827	0.056	Pathogenic	
NP_001328.1 E13D	0.083	0.029	Neutral	
NP_001391.2 T193P	0.928	0.040	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_001401.2 L716V	0.019	0.013	Neutral	
NP_001401.2 M1514I	0.045	0.017	Neutral	
NP_001401.2 R1886C	0.051	0.021	Neutral	
NP_001401.2 R2742K	0.024	0.010	Neutral	
NP_001401.2 V2283M	0.062	0.022	Neutral	
NP_001453.1 F74L	0.260	0.062	Unknown	
NP_001453.1 V127L	0.089	0.028	Neutral	
NP_001455.3 G401R	0.757	0.075	Unknown	
NP_001455.3 V550I	0.066	0.032	Neutral	
NP_001460.1 L413F	0.738	0.066	Unknown	
NP_001496.1 D154A	0.817	0.067	Pathogenic	
NP_001498.1 I308L	0.041	0.017	Neutral	
NP_001517.2 A355S	0.505	0.081	Unknown	
NP_001517.2 V353L	0.418	0.065	Unknown	
NP_001548.1 A37T	0.064	0.023	Neutral	
NP_001554.2 R661P	0.128	0.034	Neutral	
NP_001609.2 F54L	0.363	0.061	Unknown	
NP_001609.2 V762A	0.604	0.092	Unknown	
NP_001694.2 E1371D	0.050	0.022	Neutral	
NP_001695.1 D77N	0.447	0.062	Unknown	
NP_001695.1 N1360S	0.240	0.064	Unknown	
NP_001723.2 A213T	0.013	0.007	Neutral	
NP_001723.2 D503E	0.006	0.005	Neutral	
NP_001723.2 V250G	0.059	0.021	Neutral	
NP_001728.1 S427T	0.270	0.067	Unknown	
NP_001728.1 T279S	0.179	0.058	Neutral	
NP_001776.1 A70T	0.897	0.033	Pathogenic	
NP_001828.1 I250F	0.190	0.069	Neutral	
NP_001892.1 S118N	0.854	0.051	Pathogenic	
NP_001923.2 G362R	0.194	0.049	Neutral	
NP_001958.2 N375K	0.793	0.054	Pathogenic	
NP_001958.2 V277G	0.471	0.110	Unknown	
NP_001965.3 A57T	0.050	0.023	Neutral	
NP_001965.3 I424V	0.017	0.010	Neutral	
NP_001965.3 V589I	0.066	0.026	Neutral	
NP_001965.3 V724L	0.203	0.051	Neutral	
NP_002053.3 G168S	0.445	0.079	Unknown	
NP_002053.3 L260F	0.205	0.049	Neutral	
NP_002206.2 E408K	0.057	0.026	Neutral	
NP_002206.2 E585V	0.051	0.017	Neutral	
NP_002206.2 H809Y	0.026	0.015	Neutral	
NP_002206.2 H846Y	0.017	0.011	Neutral	
NP_002206.2 Q595R	0.016	0.009	Neutral	
NP_002206.2 V293M	0.015	0.009	Neutral	
NP_002207.2 N263S	0.066	0.023	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_002207.2 Q328R	0.173	0.048	Neutral	
NP_002207.2 S60L	0.025	0.012	Neutral	
NP_002207.2 V555A	0.043	0.020	Neutral	
NP_002208.3 A274S	0.104	0.054	Neutral	
NP_002208.3 G523R	0.136	0.046	Neutral	
NP_002208.3 M477I	0.004	0.004	Neutral	
NP_002208.3 P640L	0.031	0.014	Neutral	
NP_002208.3 R789H	0.010	0.008	Neutral	
NP_002208.3 T340M	0.056	0.017	Neutral	
NP_002208.3 T751A	0.007	0.005	Neutral	
NP_002209.2 I85N	0.154	0.038	Neutral	
NP_002209.2 M714I	0.008	0.006	Neutral	
NP_002209.2 Q669L	0.007	0.006	Neutral	
NP_002214.2 A1032G	0.141	0.036	Neutral	
NP_002214.2 A1898V	0.086	0.034	Neutral	
NP_002215.2 R1850Q	0.299	0.079	Unknown	
NP_002225.2 E211D	0.222	0.062	Neutral	
NP_002238.2 A775P	0.711	0.092	Unknown	
NP_002243.3 R124C	0.794	0.052	Pathogenic	
NP_002243.3 T450A	0.052	0.022	Neutral	
NP_002281.2 E930G	0.510	0.073	Unknown	
NP_002281.2 M1513V	0.481	0.071	Unknown	
NP_002281.2 V1808I	0.229	0.051	Neutral	
NP_002282.2 Q974E	0.433	0.077	Unknown	
NP_002282.2 R795G	0.871	0.046	Pathogenic	
NP_002282.2 V705L	0.788	0.061	Pathogenic	
NP_002284.3 A1201E	0.956	0.019	Pathogenic	
NP_002284.3 E1266K	0.379	0.108	Unknown	
NP_002284.3 E1537K	0.651	0.072	Unknown	
NP_002284.3 E731K	0.680	0.074	Unknown	
NP_002284.3 L888P	0.315	0.072	Unknown	
NP_002303.2 A857T	0.372	0.069	Unknown	
NP_002303.2 I658V	0.319	0.079	Unknown	
NP_002368.1 L108S	0.936	0.026	Pathogenic	
NP_002377.4 D294H	0.929	0.031	Pathogenic	
NP_002377.4 I155T	0.781	0.065	Unknown	
NP_002377.4 R151C	0.950	0.025	Pathogenic	
NP_002377.4 V156L	0.519	0.055	Unknown	
NP_002377.4 V60L	0.410	0.066	Unknown	
NP_002377.4 V92M	0.431	0.064	Unknown	
NP_002438.2 C29W	0.616	0.115	Unknown	
NP_002438.2 N440S	0.714	0.075	Unknown	
NP_002499.2 G858R	0.321	0.059	Unknown	
NP_002499.2 Q1246R	0.049	0.020	Neutral	
NP_002505.1 C15F	0.084	0.035	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_002505.1 R233H	0.079	0.041	Neutral	
NP_002522.2 V304I	0.338	0.081	Unknown	
NP_002535.3 G21D	0.273	0.053	Unknown	
NP_002555.2 P46L	0.334	0.060	Unknown	
NP_002555.2 S359P	0.562	0.076	Unknown	
NP_002557.2 A87T	0.435	0.106	Unknown	
NP_002557.2 Y261C	0.674	0.053	Unknown	
NP_002664.2 S1809C	0.727	0.092	Unknown	
NP_002681.1 K54T	0.446	0.068	Unknown	
NP_002681.1 P242R	0.368	0.124	Unknown	
NP_002681.1 Q31K	0.336	0.060	Unknown	
NP_002684.1 E1143G	0.135	0.038	Neutral	
NP_002684.1 Q1236H	0.077	0.029	Neutral	
NP_002684.1 S998W	0.551	0.067	Unknown	
NP_002697.1 D84E	0.578	0.086	Unknown	
NP_002697.1 L50F	0.276	0.075	Unknown	
NP_002697.1 Q161E	0.457	0.057	Unknown	
NP_002703.1 E158K	0.254	0.087	Unknown	
NP_002703.1 R123Q	0.166	0.042	Neutral	
NP_002716.1 D134E	0.469	0.073	Unknown	
NP_002763.2 E134Q	0.026	0.011	Neutral	
NP_002763.2 S545C	0.023	0.012	Neutral	
NP_002898.2 K544M	0.517	0.064	Unknown	
NP_002958.2 D530E	0.332	0.082	Unknown	
NP_002958.2 I201T	0.791	0.059	Pathogenic	
NP_002967.2 G904R	0.037	0.016	Neutral	
NP_002967.2 I513M	0.151	0.040	Neutral	
NP_002967.2 M600L	0.056	0.025	Neutral	
NP_002967.2 R1643Q	0.011	0.007	Neutral	
NP_002967.2 V1596L	0.005	0.004	Neutral	
NP_002967.2 V657A	0.041	0.016	Neutral	
NP_002971.2 A122P	0.328	0.072	Unknown	
NP_003053.1 D845N	0.485	0.063	Unknown	
NP_003053.1 P1064A	0.569	0.066	Unknown	
NP_003053.1 R810Q	0.334	0.073	Unknown	
NP_003053.1 S629N	0.543	0.066	Unknown	
NP_003060.2 G837A	0.139	0.047	Neutral	
NP_003063.2 S1239P	0.681	0.061	Unknown	
NP_003162.2 P30T	0.286	0.065	Unknown	
NP_003162.2 S2F	0.058	0.017	Neutral	
NP_003174.3 H78D	0.858	0.061	Pathogenic	
NP_003174.3 R202G	0.279	0.067	Unknown	
NP_003234.2 F142L	0.817	0.066	Pathogenic	
NP_003234.2 S14N	0.129	0.032	Neutral	
NP_003234.2 S15F	0.226	0.046	Neutral	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_003238.2 A121T	0.601	0.073	Unknown	
NP_003239.2 A420V	0.113	0.047	Neutral	
NP_003239.2 D303N	0.324	0.070	Unknown	
NP_003239.2 D568N	0.914	0.035	Pathogenic	
NP_003239.2 V646I	0.212	0.062	Neutral	
NP_003239.2 V737I	0.559	0.105	Unknown	
NP_003254.2 A469T	0.203	0.053	Neutral	
NP_003254.2 H118Y	0.375	0.071	Unknown	
NP_003254.2 P315L	0.485	0.070	Unknown	
NP_003254.2 R80T	0.505	0.072	Unknown	
NP_003254.2 S602I	0.086	0.026	Neutral	
NP_003254.2 V587G	0.076	0.023	Neutral	
NP_003256.1 L159F	0.820	0.067	Pathogenic	
NP_003256.1 L297V	0.806	0.043	Pathogenic	
NP_003256.1 L826F	0.635	0.050	Unknown	
NP_003259.2 D694G	0.661	0.091	Unknown	
NP_003259.2 I644F	0.425	0.063	Unknown	
NP_003259.2 L487I	0.308	0.068	Unknown	
NP_003259.2 N143T	0.440	0.086	Unknown	
NP_003259.2 N598T	0.493	0.087	Unknown	
NP_003259.2 P112A	0.275	0.062	Unknown	
NP_003292.1 N10K	0.457	0.071	Unknown	
NP_003296.1 G220E	0.900	0.051	Pathogenic	
NP_003296.1 L662F	0.530	0.113	Unknown	
NP_003296.1 M740T	0.785	0.069	Unknown	
NP_003298.1 D780E	0.079	0.026	Neutral	
NP_003298.1 E1359K	0.162	0.048	Neutral	
NP_003298.1 I1368M	0.210	0.039	Neutral	
NP_003298.1 R1199W	0.463	0.082	Unknown	
NP_003298.1 R755C	0.576	0.106	Unknown	
NP_003298.1 T1277A	0.267	0.055	Unknown	
NP_003298.1 V166I	0.189	0.051	Neutral	
NP_003298.1 V385M	0.064	0.025	Neutral	
NP_003298.1 W479G	0.649	0.093	Unknown	
NP_003398.1 P37S	0.175	0.036	Neutral	
NP_003398.1 P55S	0.372	0.086	Unknown	
NP_003570.2 N686T	0.618	0.086	Unknown	
NP_003570.2 R380Q	0.518	0.074	Unknown	
NP_003580.1 K544R	0.226	0.073	Unknown	
NP_003580.1 N321K	0.916	0.037	Pathogenic	
NP_003583.2 A394G	0.457	0.097	Unknown	
NP_003583.2 D396Y	0.873	0.047	Pathogenic	
NP_003585.3 D1155H	0.908	0.057	Pathogenic	
NP_003585.3 E256G	0.093	0.034	Neutral	
NP_003585.3 K1134R	0.473	0.084	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_003585.3 K167E	0.091	0.032	Neutral	
NP_003585.3 K213R	0.045	0.017	Neutral	
NP_003585.3 P502T	0.242	0.060	Unknown	
NP_003585.3 R761C	0.954	0.025	Pathogenic	
NP_003585.3 S273T	0.115	0.044	Neutral	
NP_003585.3 S956G	0.143	0.042	Neutral	
NP_003585.3 V914I	0.156	0.041	Neutral	
NP_003603.1 S115T	0.140	0.048	Neutral	
NP_003605.1 P53A	0.323	0.071	Unknown	
NP_003658.1 F482L	0.357	0.117	Unknown	
NP_003658.1 R662H	0.741	0.065	Unknown	
NP_003658.1 V278A	0.274	0.072	Unknown	
NP_003658.1 V666A	0.128	0.047	Neutral	
NP_003684.2 E639D	0.187	0.060	Neutral	
NP_003684.2 G626S	0.116	0.038	Neutral	
NP_003732.2 M630L	0.084	0.026	Neutral	
NP_003738.2 L718F	0.778	0.058	Pathogenic	
NP_003738.2 L768I	0.738	0.063	Unknown	
NP_003738.2 L888F	0.796	0.050	Pathogenic	
NP_003738.2 S492Y	0.926	0.028	Pathogenic	
NP_003738.2 V852I	0.850	0.102	Unknown	
NP_003766.1 A242P	0.678	0.076	Unknown	
NP_003804.1 L695F	0.074	0.030	Neutral	
NP_003806.3 K191T	0.034	0.015	Neutral	
NP_003806.3 L240M	0.641	0.069	Unknown	
NP_003806.3 S567R	0.640	0.060	Unknown	
NP_003807.1 E289G	0.812	0.048	Pathogenic	
NP_003807.1 R465Q	0.342	0.097	Unknown	
NP_003808.2 L735P	0.383	0.072	Unknown	
NP_003808.2 M501I	0.114	0.038	Neutral	
NP_003808.2 N638H	0.112	0.054	Neutral	
NP_003808.2 V244M	0.281	0.070	Unknown	
NP_003808.2 V681F	0.029	0.018	Neutral	
NP_003845.2 A194V	0.081	0.037	Neutral	
NP_003845.2 A471T	0.072	0.026	Neutral	
NP_003845.2 I237T	0.614	0.106	Unknown	
NP_003845.2 V352I	0.158	0.042	Neutral	
NP_003861.1 L1190F	0.601	0.076	Unknown	
NP_003872.1 G167E	0.168	0.036	Neutral	
NP_003956.2 I243V	0.032	0.014	Neutral	
NP_003956.2 V168M	0.033	0.017	Neutral	
NP_003957.2 S956G	0.466	0.074	Unknown	
NP_003963.1 K1421E	0.863	0.043	Pathogenic	
NP_003963.1 T912M	0.155	0.045	Neutral	
NP_003963.1 V810F	0.790	0.063	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_004078.2 D666E	0.507	0.075	Unknown	
NP_004078.2 K140R	0.494	0.084	Unknown	
NP_004079.3 R112G	0.040	0.020	Neutral	
NP_004092.1 N250D	0.106	0.033	Neutral	
NP_004177.3 F639V	0.410	0.066	Unknown	
NP_004177.3 L503M	0.078	0.030	Neutral	
NP_004254.2 F481S	0.858	0.057	Pathogenic	
NP_004373.2 A60V	0.342	0.075	Unknown	
NP_004397.2 D1390N	0.092	0.034	Neutral	
NP_004397.2 N322D	0.307	0.065	Unknown	
NP_004397.2 R1373H	0.033	0.018	Neutral	
NP_004548.3 E513D	0.508	0.081	Unknown	
NP_004548.3 G1213R	0.661	0.107	Unknown	
NP_004548.3 G534S	0.539	0.089	Unknown	
NP_004548.3 T320S	0.090	0.029	Neutral	
NP_004553.2 D394N	0.320	0.058	Unknown	
NP_004553.2 E310D	0.161	0.050	Neutral	
NP_004553.2 E452Q	0.279	0.070	Unknown	
NP_004615.2 R445L	0.641	0.059	Unknown	
NP_004649.1 V11L	0.137	0.034	Neutral	
NP_004706.3 L755S	0.771	0.065	Unknown	
NP_004706.3 R836Q	0.756	0.067	Unknown	
NP_004706.3 T340M	0.109	0.032	Neutral	
NP_004738.3 E624Q	0.341	0.066	Unknown	
NP_004738.3 P1481Q	0.227	0.072	Unknown	
NP_004738.3 S1435T	0.148	0.034	Neutral	
NP_004758.3 G90D	0.015	0.009	Neutral	
NP_004758.3 P81A	0.030	0.014	Neutral	
NP_004761.2 E657G	0.237	0.057	Neutral	
NP_004761.2 N230T	0.526	0.096	Unknown	
NP_004770.4 Q278P	0.762	0.084	Unknown	
NP_004778.1 E1104K	0.952	0.021	Pathogenic	
NP_004778.1 G125W	0.460	0.055	Unknown	
NP_004778.1 L1109F	0.894	0.036	Pathogenic	
NP_004808.2 S1010F	0.362	0.069	Unknown	
NP_004832.1 I252T	0.914	0.052	Pathogenic	
NP_004967.1 T325P	0.774	0.074	Unknown	
NP_004998.3 R224C	0.264	0.049	Neutral	
NP_005012.2 F721L	0.514	0.111	Unknown	
NP_005012.2 P153L	0.394	0.064	Unknown	
NP_005012.2 R471W	0.569	0.088	Unknown	
NP_005012.2 S583G	0.144	0.059	Neutral	
NP_005012.2 S786N	0.548	0.087	Unknown	
NP_005012.2 V620M	0.148	0.039	Neutral	
NP_005039.1 L159F	0.064	0.023	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_005084.1 N498S	0.802	0.079	Unknown	
NP_005084.1 Q163K	0.730	0.072	Unknown	
NP_005090.3 A77T	0.047	0.021	Neutral	
NP_005090.3 G561A	0.487	0.099	Unknown	
NP_005090.3 P720A	0.166	0.047	Neutral	
NP_005090.3 R562C	0.484	0.060	Unknown	
NP_005217.2 R243Q	0.546	0.075	Unknown	
NP_005217.2 S225T	0.851	0.075	Pathogenic	
NP_005233.3 L90F	0.752	0.084	Unknown	
NP_005233.3 R270Q	0.314	0.054	Unknown	
NP_005273.1 A120G	0.142	0.043	Neutral	
NP_005281.1 V252F	0.041	0.017	Neutral	
NP_005282.1 A190G	0.356	0.076	Unknown	
NP_005288.3 T204P	0.854	0.052	Pathogenic	
NP_005289.2 S360C	0.006	0.005	Neutral	
NP_005297.1 I46V	0.108	0.036	Neutral	
NP_005297.1 V260G	0.104	0.031	Neutral	
NP_005365.3 R500W	0.715	0.097	Unknown	
NP_005413.2 P479L	0.069	0.022	Neutral	
NP_005413.2 Q19R	0.010	0.008	Neutral	
NP_005413.2 R371G	0.037	0.015	Neutral	
NP_005413.2 V1102I	0.066	0.030	Neutral	
NP_005413.2 Y1105S	0.301	0.084	Unknown	
NP_005451.2 E709Q	0.413	0.084	Unknown	
NP_005451.2 M443I	0.838	0.050	Pathogenic	
NP_005475.2 D235G	0.345	0.069	Unknown	
NP_005475.2 N481H	0.128	0.033	Neutral	
NP_005475.2 R296Q	0.145	0.042	Neutral	
NP_005475.2 S161N	0.174	0.061	Neutral	
NP_005475.2 T218A	0.073	0.024	Neutral	
NP_005503.1 A646P	0.606	0.075	Unknown	
NP_005550.2 L137M	0.802	0.069	Unknown	
NP_005551.3 E2378D	0.296	0.062	Unknown	
NP_005551.3 G3614R	0.170	0.041	Neutral	
NP_005551.3 R3079W	0.279	0.080	Unknown	
NP_005551.3 T1671M	0.315	0.066	Unknown	
NP_005553.2 A111P	0.350	0.065	Unknown	
NP_005553.2 D136V	0.258	0.060	Unknown	
NP_005553.2 D61E	0.024	0.012	Neutral	
NP_005553.2 D963E	0.050	0.025	Neutral	
NP_005553.2 E971K	0.126	0.032	Neutral	
NP_005553.2 I839S	0.076	0.026	Neutral	
NP_005553.2 R337Q	0.493	0.090	Unknown	
NP_005553.2 S925T	0.232	0.057	Neutral	
NP_005553.2 T124M	0.177	0.054	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_005553.2 T545P	0.544	0.075	Unknown	
NP_005573.2 N53K	0.055	0.024	Neutral	
NP_005573.2 S99R	0.026	0.012	Neutral	
NP_005573.2 T430A	0.136	0.043	Neutral	
NP_005573.2 V20L	0.005	0.005	Neutral	
NP_005631.1 V438L	0.117	0.041	Neutral	
NP_005673.3 L337P	0.110	0.029	Neutral	
NP_005673.3 Q306H	0.048	0.017	Neutral	
NP_005673.3 S281R	0.045	0.019	Neutral	
NP_005675.3 Y317S	0.613	0.066	Unknown	
NP_005752.1 E494Q	0.106	0.052	Neutral	
NP_005752.1 R614S	0.157	0.051	Neutral	
NP_005752.1 T466P	0.191	0.062	Neutral	
NP_005752.1 T590A	0.041	0.015	Neutral	
NP_005752.1 V638G	0.085	0.033	Neutral	
NP_005758.2 C137W	0.497	0.097	Unknown	
NP_005786.1 F16L	0.180	0.057	Neutral	
NP_005786.1 V129D	0.471	0.073	Unknown	
NP_005903.2 V103I	0.518	0.116	Unknown	
NP_005904.1 F209L	0.820	0.048	Pathogenic	
NP_006050.3 E544G	0.042	0.017	Neutral	
NP_006050.3 R1264W	0.026	0.013	Neutral	
NP_006050.3 S1082G	0.013	0.008	Neutral	
NP_006050.3 S813N	0.032	0.012	Neutral	
NP_006050.3 S813R	0.039	0.016	Neutral	
NP_006053.2 T197P	0.047	0.017	Neutral	
NP_006059.2 V327M	0.368	0.060	Unknown	
NP_006062.1 S991R	0.144	0.040	Neutral	
NP_006065.2 D155N	0.133	0.044	Neutral	
NP_006065.2 R242T	0.085	0.025	Neutral	
NP_006065.2 R327L	0.306	0.094	Unknown	
NP_006065.2 T232A	0.083	0.045	Neutral	
NP_006065.2 T294K	0.217	0.041	Neutral	
NP_006071.1 I400V	0.193	0.043	Neutral	
NP_006142.1 A244T	0.028	0.013	Neutral	
NP_006142.1 T105I	0.037	0.016	Neutral	
NP_006148.2 E270D	0.452	0.063	Unknown	
NP_006148.2 G191C	0.618	0.066	Unknown	
NP_006148.2 R354W	0.494	0.071	Unknown	
NP_006148.2 V287I	0.271	0.054	Unknown	
NP_006165.1 G110C	0.797	0.101	Unknown	
NP_006171.2 S488I	0.846	0.050	Pathogenic	
NP_006178.2 A584T	0.035	0.016	Neutral	
NP_006178.2 R610C	0.208	0.075	Unknown	
NP_006178.2 R932Q	0.464	0.097	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_006199.2 K173Q	0.235	0.056	Neutral	
NP_006199.2 L611V	0.180	0.049	Neutral	
NP_006199.2 R774C	0.565	0.071	Unknown	
NP_006288.2 R280H	0.040	0.018	Neutral	
NP_006288.2 T304A	0.073	0.026	Neutral	
NP_006288.2 V72A	0.098	0.028	Neutral	
NP_006312.1 E29D	0.020	0.012	Neutral	
NP_006312.1 Y409D	0.977	0.013	Pathogenic	
NP_006370.1 A645G	0.351	0.078	Unknown	
NP_006370.1 I601V	0.268	0.101	Unknown	
NP_006370.1 R611G	0.944	0.024	Pathogenic	
NP_006377.2 I299L	0.893	0.038	Pathogenic	
NP_006409.3 L506M	0.050	0.030	Neutral	
NP_006428.2 A1331T	0.074	0.029	Neutral	
NP_006428.2 G1265A	0.142	0.056	Neutral	
NP_006428.2 I81V	0.114	0.038	Neutral	
NP_006428.2 S1253T	0.074	0.047	Neutral	
NP_006497.2 A783S	0.341	0.069	Unknown	
NP_006497.2 Q708H	0.508	0.079	Unknown	
NP_006506.3 D238A	0.484	0.072	Unknown	
NP_006506.3 V412G	0.356	0.064	Unknown	
NP_006555.1 E3K	0.129	0.048	Neutral	
NP_006574.1 H211R	0.785	0.053	Pathogenic	
NP_006574.1 S18L	0.712	0.061	Unknown	
NP_006574.1 V121G	0.363	0.096	Unknown	
NP_006624.2 D527E	0.070	0.028	Neutral	
NP_006624.2 E883Q	0.744	0.072	Unknown	
NP_006624.2 F667L	0.240	0.077	Unknown	
NP_006624.2 L207Q	0.839	0.048	Pathogenic	
NP_006624.2 L629F	0.163	0.046	Neutral	
NP_006624.2 P479R	0.794	0.051	Pathogenic	
NP_006624.2 R1052I	0.825	0.041	Pathogenic	
NP_006624.2 R1379W	0.832	0.052	Pathogenic	
NP_006624.2 R1459Q	0.865	0.039	Pathogenic	
NP_006624.2 R714W	0.585	0.085	Unknown	
NP_006624.2 T894I	0.850	0.058	Pathogenic	
NP_006624.2 V455A	0.547	0.064	Unknown	
NP_006624.2 V647L	0.353	0.053	Unknown	
NP_006624.2 V695I	0.271	0.058	Unknown	
NP_006700.3 L298V	0.446	0.086	Unknown	
NP_006764.3 A486G	0.589	0.157	Unknown	
NP_006764.3 C183Y	0.302	0.060	Unknown	
NP_006764.3 K647R	0.181	0.050	Neutral	
NP_006785.1 N78K	0.126	0.038	Neutral	
NP_006819.2 A913G	0.366	0.074	Unknown	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_006819.2 I2040V	0.127	0.044	Neutral	
NP_006819.2 Q2083H	0.300	0.061	Unknown	
NP_006819.2 S1016C	0.483	0.073	Unknown	
NP_006833.2 P251L	0.625	0.077	Unknown	
NP_008851.3 I1944T	0.223	0.067	Unknown	
NP_008860.4 C247W	0.458	0.074	Unknown	
NP_008860.4 Q60R	0.159	0.048	Neutral	
NP_008925.1 A568E	0.045	0.019	Neutral	
NP_008958.2 N1042D	0.081	0.032	Neutral	
NP_008968.4 R620G	0.972	0.015	Pathogenic	
NP_008971.2 A333S	0.244	0.064	Unknown	
NP_008971.2 S287A	0.621	0.076	Unknown	
NP_008979.3 R15H	0.037	0.020	Neutral	
NP_008979.3 R282T	0.060	0.021	Neutral	
NP_008979.3 S224N	0.203	0.065	Neutral	
NP_008980.1 R378Q	0.008	0.006	Neutral	
NP_008983.2 M302V	0.361	0.067	Unknown	
NP_009054.5 G1132D	0.434	0.079	Unknown	
NP_009086.4 A132T	0.335	0.080	Unknown	
NP_009126.2 A731T	0.025	0.012	Neutral	
NP_009126.2 I261L	0.218	0.057	Neutral	
NP_009168.4 E516K	0.017	0.013	Neutral	
NP_009168.4 G412R	0.110	0.034	Neutral	
NP_009168.4 R558C	0.068	0.032	Neutral	
NP_009195.1 C349R	0.021	0.010	Neutral	
NP_015627.1 I117T	0.949	0.024	Pathogenic	
NP_015628.2 R58T	0.229	0.055	Neutral	
NP_031382.2 E1168D	0.010	0.007	Neutral	
NP_031382.2 Q574H	0.007	0.005	Neutral	
NP_031382.2 R1612S	0.031	0.017	Neutral	
NP_031387.3 D837E	0.006	0.006	Neutral	
NP_031387.3 P354H	0.031	0.016	Neutral	
NP_031398.2 Q34R	0.296	0.071	Unknown	
NP_031399.2 A28E	0.311	0.065	Unknown	
NP_036257.1 C397W	0.669	0.078	Unknown	
NP_036257.1 E412K	0.280	0.070	Unknown	
NP_036257.1 F55L	0.894	0.042	Pathogenic	
NP_036257.1 I53F	0.452	0.122	Unknown	
NP_036257.1 P365L	0.435	0.077	Unknown	
NP_036413.1 F11L	0.512	0.109	Unknown	
NP_036413.1 I600T	0.280	0.058	Unknown	
NP_036413.1 R511H	0.151	0.051	Neutral	
NP_036413.1 S304P	0.615	0.086	Unknown	
NP_036416.1 L807P	0.595	0.124	Unknown	
NP_036416.1 R965C	0.447	0.077	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_036425.1 R1198Q	0.871	0.054	Pathogenic	
NP_036434.1 A1164P	0.309	0.072	Unknown	
NP_036459.1 I470L	0.178	0.047	Neutral	
NP_036483.2 I103M	0.428	0.063	Unknown	
NP_036483.2 M62I	0.012	0.008	Neutral	
NP_036515.4 V122L	0.402	0.072	Unknown	
NP_036516.1 H335Q	0.643	0.065	Unknown	
NP_036547.1 M314L	0.398	0.152	Unknown	
NP_036547.1 V679L	0.105	0.038	Neutral	
NP_036563.1 R208P	0.766	0.059	Pathogenic	
NP_037363.1 E423D	0.086	0.030	Neutral	
NP_037363.1 R486Q	0.165	0.045	Neutral	
NP_037396.3 A378S	0.288	0.061	Unknown	
NP_037396.3 R264L	0.763	0.054	Pathogenic	
NP_037399.2 L581P	0.137	0.035	Neutral	
NP_037412.2 A148G	0.098	0.030	Neutral	
NP_037416.1 G220A	0.856	0.057	Pathogenic	
NP_037505.1 R607K	0.380	0.064	Unknown	
NP_038474.2 A183T	0.121	0.033	Neutral	
NP_038474.2 S408T	0.060	0.021	Neutral	
NP_038474.2 V439A	0.132	0.035	Neutral	
NP_038475.2 L614F	0.084	0.029	Neutral	
NP_039269.2 R867H	0.043	0.020	Neutral	
NP_054722.2 D394G	0.921	0.048	Pathogenic	
NP_054722.2 E316G	0.881	0.069	Pathogenic	
NP_054722.2 S249A	0.248	0.053	Neutral	
NP_054733.2 G1978A	0.567	0.066	Unknown	
NP_054767.3 D2Y	0.347	0.052	Unknown	
NP_054799.4 P982A	0.160	0.045	Neutral	
NP_054858.2 N1044K	0.056	0.020	Neutral	
NP_054859.2 A43T	0.065	0.028	Neutral	
NP_054859.2 E377Q	0.287	0.096	Unknown	
NP_054859.2 V512M	0.350	0.068	Unknown	
NP_054872.2 N3S	0.059	0.028	Neutral	
NP_054879.3 I284V	0.323	0.068	Unknown	
NP_055052.1 E723G	0.071	0.022	Neutral	
NP_055052.1 K654R	0.063	0.028	Neutral	
NP_055052.1 Q142L	0.451	0.072	Unknown	
NP_055052.1 S716T	0.040	0.016	Neutral	
NP_055059.2 R827Q	0.458	0.071	Unknown	
NP_055084.3 L687F	0.088	0.041	Neutral	
NP_055084.3 P627S	0.226	0.052	Neutral	
NP_055094.1 E197D	0.641	0.071	Unknown	
NP_055098.1 P23S	0.342	0.073	Unknown	
NP_055098.1 S785G	0.171	0.046	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_055118.1 T264S	0.064	0.027	Neutral	
NP_055129.2 D580E	0.509	0.073	Unknown	
NP_055129.2 F789L	0.226	0.049	Neutral	
NP_055201.2 F266V	0.108	0.034	Neutral	
NP_055201.2 L324F	0.007	0.006	Neutral	
NP_055201.2 P464L	0.044	0.019	Neutral	
NP_055201.2 V404I	0.008	0.006	Neutral	
NP_055240.2 S888R	0.215	0.062	Neutral	
NP_055243.1 G847D	0.041	0.017	Neutral	
NP_055243.1 M918T	0.060	0.038	Neutral	
NP_055243.1 M931T	0.022	0.014	Neutral	
NP_055243.1 P299R	0.339	0.112	Unknown	
NP_055243.1 V435M	0.321	0.079	Unknown	
NP_055279.3 P199L	0.245	0.054	Neutral	
NP_055279.3 R263Q	0.087	0.027	Neutral	
NP_055279.3 R381H	0.098	0.042	Neutral	
NP_055279.3 T3A	0.047	0.020	Neutral	
NP_055279.3 V413I	0.132	0.034	Neutral	
NP_055294.1 A30E	0.218	0.054	Neutral	
NP_055314.1 N3H	0.021	0.011	Neutral	
NP_055336.1 A197T	0.010	0.006	Neutral	
NP_055336.1 M155T	0.004	0.004	Neutral	
NP_055336.1 R511L	0.276	0.081	Unknown	
NP_055437.2 R547H	0.030	0.017	Neutral	
NP_055449.1 Q449E	0.073	0.024	Neutral	
NP_055468.2 T266I	0.074	0.020	Neutral	
NP_055496.2 G117D	0.100	0.031	Neutral	
NP_055496.2 L940M	0.223	0.046	Neutral	
NP_055496.2 L946F	0.333	0.095	Unknown	
NP_055496.2 R734C	0.448	0.076	Unknown	
NP_055585.1 I750M	0.421	0.067	Unknown	
NP_055624.2 A629G	0.229	0.055	Neutral	
NP_055624.2 V54L	0.079	0.027	Neutral	
NP_055650.1 A14T	0.006	0.006	Neutral	
NP_055730.2 F1382Y	0.069	0.024	Neutral	
NP_055730.2 V1220L	0.036	0.017	Neutral	
NP_055751.1 H144Q	0.118	0.036	Neutral	
NP_055751.1 I255V	0.073	0.028	Neutral	
NP_055751.1 L81F	0.069	0.026	Neutral	
NP_055751.1 S92F	0.120	0.039	Neutral	
NP_055757.2 A545T	0.076	0.030	Neutral	
NP_055757.2 M458L	0.144	0.047	Neutral	
NP_055757.2 Q122E	0.550	0.076	Unknown	
NP_055757.2 S634G	0.138	0.053	Neutral	
NP_055757.2 S671F	0.633	0.061	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_055757.2 T233M	0.269	0.078	Unknown	
NP_055757.2 V670G	0.333	0.081	Unknown	
NP_055826.1 D181E	0.178	0.050	Neutral	
NP_055826.1 M385T	0.022	0.011	Neutral	
NP_055826.1 V284M	0.359	0.064	Unknown	
NP_055826.1 V339I	0.061	0.028	Neutral	
NP_055826.1 V644G	0.275	0.066	Unknown	
NP_055835.2 K1066N	0.088	0.027	Neutral	
NP_055835.2 Y34F	0.080	0.024	Neutral	
NP_055904.1 G1246S	0.048	0.020	Neutral	
NP_055904.1 S725L	0.093	0.027	Neutral	
NP_055904.1 T2180I	0.415	0.095	Unknown	
NP_055904.1 V1479M	0.682	0.097	Unknown	
NP_055918.2 V505L	0.156	0.041	Neutral	
NP_055921.2 D193G	0.093	0.036	Neutral	
NP_055921.2 S997N	0.100	0.031	Neutral	
NP_055932.2 I6M	0.066	0.023	Neutral	
NP_055932.2 R168W	0.099	0.034	Neutral	
NP_055932.2 T503K	0.092	0.027	Neutral	
NP_055992.1 A606G	0.490	0.103	Unknown	
NP_055992.1 T375K	0.528	0.064	Unknown	
NP_056023.3 D1776G	0.055	0.016	Neutral	
NP_056023.3 D871E	0.009	0.006	Neutral	
NP_056023.3 K906R	0.116	0.030	Neutral	
NP_056023.3 S1215P	0.085	0.027	Neutral	
NP_056023.3 S46T	0.036	0.013	Neutral	
NP_056023.3 T507I	0.011	0.007	Neutral	
NP_056023.3 T840N	0.056	0.018	Neutral	
NP_056051.2 A500V	0.161	0.042	Neutral	
NP_056051.2 R465Q	0.111	0.052	Neutral	
NP_056051.2 V997G	0.342	0.090	Unknown	
NP_056151.2 E418D	0.698	0.067	Unknown	
NP_056151.2 R84Q	0.826	0.064	Pathogenic	
NP_056175.3 A289S	0.443	0.066	Unknown	
NP_056175.3 C878F	0.495	0.076	Unknown	
NP_056197.2 Q534E	0.372	0.059	Unknown	
NP_056250.3 N820K	0.889	0.029	Pathogenic	
NP_056256.1 S384R	0.015	0.009	Neutral	
NP_056323.2 H601N	0.761	0.060	Unknown	
NP_056341.1 K456T	0.837	0.056	Pathogenic	
NP_056356.2 P1031R	0.010	0.007	Neutral	
NP_056356.2 T688S	0.076	0.028	Neutral	
NP_056383.1 C563W	0.622	0.115	Unknown	
NP_056392.2 N533Y	0.068	0.034	Neutral	
NP_056392.2 S45N	0.033	0.013	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_056450.2 L196P	0.935	0.024	Pathogenic	
NP_057186.1 Q71E	0.167	0.036	Neutral	
NP_057199.1 L30V	0.108	0.033	Neutral	
NP_057234.2 A400P	0.540	0.051	Unknown	
NP_057316.3 A433T	0.095	0.038	Neutral	
NP_057316.3 A78E	0.104	0.038	Neutral	
NP_057316.3 L551S	0.358	0.059	Unknown	
NP_057316.3 T549I	0.080	0.035	Neutral	
NP_057435.2 H119Y	0.293	0.053	Unknown	
NP_057435.2 P81R	0.059	0.025	Neutral	
NP_057435.2 V207I	0.110	0.038	Neutral	
NP_057480.2 E171G	0.039	0.017	Neutral	
NP_057480.2 K434N	0.138	0.034	Neutral	
NP_057480.2 V170G	0.083	0.027	Neutral	
NP_057525.1 M351I	0.489	0.076	Unknown	
NP_057636.2 D451V	0.007	0.005	Neutral	
NP_057636.2 S123T	0.008	0.006	Neutral	
NP_057636.2 V172L	0.010	0.007	Neutral	
NP_057646.1 Q11L	0.240	0.065	Unknown	
NP_057652.1 F418S	0.665	0.073	Unknown	
NP_057652.1 H426Q	0.116	0.031	Neutral	
NP_058197.2 M702K	0.257	0.063	Unknown	
NP_059130.2 E727G	0.057	0.020	Neutral	
NP_059130.2 I962T	0.335	0.054	Unknown	
NP_059130.2 L1178F	0.052	0.017	Neutral	
NP_059130.2 V1139I	0.051	0.025	Neutral	
NP_059134.1 S416C	0.074	0.028	Neutral	
NP_059990.2 L654F	0.339	0.094	Unknown	
NP_059990.2 T725I	0.211	0.051	Neutral	
NP_060024.2 A920S	0.147	0.057	Neutral	
NP_060024.2 D488N	0.112	0.046	Neutral	
NP_060024.2 S1081G	0.068	0.022	Neutral	
NP_060060.3 E654K	0.700	0.065	Unknown	
NP_060060.3 G444S	0.331	0.074	Unknown	
NP_060060.3 H684Y	0.042	0.019	Neutral	
NP_060060.3 V730G	0.365	0.070	Unknown	
NP_060101.3 I998V	0.124	0.036	Neutral	
NP_060101.3 V672M	0.022	0.010	Neutral	
NP_060106.2 P918T	0.701	0.073	Unknown	
NP_060106.2 R719Q	0.040	0.019	Neutral	
NP_060106.2 R830P	0.592	0.078	Unknown	
NP_060158.2 A261P	0.129	0.037	Neutral	
NP_060158.2 Q293H	0.231	0.052	Neutral	
NP_060158.2 V222G	0.543	0.068	Unknown	
NP_060161.2 Q354R	0.014	0.008	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_060174.2 S158F	0.484	0.060	Unknown	
NP_060177.2 C331W	0.598	0.063	Unknown	
NP_060203.3 A316G	0.209	0.059	Neutral	
NP_060203.3 A53D	0.173	0.054	Neutral	
NP_060203.3 F924S	0.048	0.018	Neutral	
NP_060203.3 G760R	0.947	0.026	Pathogenic	
NP_060203.3 R450H	0.078	0.027	Neutral	
NP_060203.3 V191A	0.864	0.064	Pathogenic	
NP_060203.3 V285A	0.703	0.060	Unknown	
NP_060203.3 V691I	0.160	0.048	Neutral	
NP_060363.2 A537P	0.030	0.014	Neutral	
NP_060363.2 R423H	0.033	0.015	Neutral	
NP_060365.7 G766S	0.502	0.102	Unknown	
NP_060371.2 M111T	0.613	0.065	Unknown	
NP_060469.4 V1061I	0.332	0.101	Unknown	
NP_060533.2 E334K	0.931	0.032	Pathogenic	
NP_060533.2 T481P	0.705	0.076	Unknown	
NP_060533.2 T512A	0.247	0.056	Neutral	
NP_060543.5 C442Y	0.040	0.018	Neutral	
NP_060568.3 C719F	0.810	0.056	Pathogenic	
NP_060610.2 A182T	0.095	0.043	Neutral	
NP_060610.2 P412T	0.162	0.054	Neutral	
NP_060610.2 T509A	0.216	0.074	Unknown	
NP_060684.4 I193V	0.129	0.056	Neutral	
NP_060684.4 N368D	0.077	0.023	Neutral	
NP_060684.4 Q280E	0.078	0.023	Neutral	
NP_060914.2 L80P	0.895	0.042	Pathogenic	
NP_060941.2 E237D	0.795	0.066	Unknown	
NP_060960.2 I724F	0.405	0.105	Unknown	
NP_061008.2 A4V	0.011	0.007	Neutral	
NP_061008.2 C259R	0.063	0.032	Neutral	
NP_061008.2 G263E	0.074	0.026	Neutral	
NP_061116.2 M378V	0.016	0.011	Neutral	
NP_061116.2 M681T	0.008	0.006	Neutral	
NP_061135.2 Q463K	0.238	0.059	Unknown	
NP_061146.1 D491H	0.019	0.010	Neutral	
NP_061496.2 A2108S	0.119	0.043	Neutral	
NP_061496.2 R530H	0.375	0.081	Unknown	
NP_061822.1 A281P	0.461	0.074	Unknown	
NP_061877.1 L1016M	0.025	0.012	Neutral	
NP_061877.1 T621P	0.058	0.022	Neutral	
NP_061901.2 K99R	0.161	0.050	Neutral	
NP_061901.2 L595F	0.416	0.074	Unknown	
NP_061943.2 L158V	0.214	0.064	Unknown	
NP_061955.1 S119L	0.545	0.087	Unknown	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_062547.1 N466S	0.190	0.050	Neutral	
NP_062815.2 A563T	0.032	0.015	Neutral	
NP_062815.2 A8V	0.053	0.021	Neutral	
NP_062815.2 R154H	0.047	0.018	Neutral	
NP_062815.2 R263W	0.406	0.119	Unknown	
NP_062816.2 P740L	0.218	0.053	Neutral	
NP_064547.2 H483D	0.452	0.067	Unknown	
NP_064552.3 S298T	0.031	0.014	Neutral	
NP_064575.1 R187S	0.052	0.017	Neutral	
NP_064707.1 V230I	0.408	0.100	Unknown	
NP_065082.2 A62T	0.039	0.024	Neutral	
NP_065110.1 F36L	0.154	0.054	Neutral	
NP_065110.1 S236L	0.083	0.033	Neutral	
NP_065122.1 F429S	0.956	0.024	Pathogenic	
NP_065147.1 D530E	0.293	0.062	Unknown	
NP_065147.1 Q115E	0.093	0.028	Neutral	
NP_065147.1 S14R	0.123	0.036	Neutral	
NP_065208.2 A1462V	0.142	0.055	Neutral	
NP_065208.2 A944T	0.185	0.047	Neutral	
NP_065208.2 R832Q	0.047	0.025	Neutral	
NP_065208.2 V1546I	0.172	0.050	Neutral	
NP_065394.1 E349G	0.783	0.074	Unknown	
NP_065690.2 A12G	0.101	0.027	Neutral	
NP_065761.1 L416V	0.086	0.036	Neutral	
NP_065789.1 A1299G	0.115	0.041	Neutral	
NP_065822.2 D399G	0.158	0.044	Neutral	
NP_065825.1 E166G	0.470	0.084	Unknown	
NP_065845.1 L1228F	0.290	0.071	Unknown	
NP_065847.1 R1002C	0.847	0.051	Pathogenic	
NP_065882.1 A565T	0.052	0.024	Neutral	
NP_065882.1 P180A	0.167	0.057	Neutral	
NP_065909.1 N307S	0.319	0.067	Unknown	
NP_065909.1 P954S	0.243	0.058	Unknown	
NP_065909.1 R700Q	0.145	0.044	Neutral	
NP_065915.1 K213E	0.198	0.054	Neutral	
NP_065916.2 S416C	0.332	0.070	Unknown	
NP_065924.3 R658K	0.204	0.045	Neutral	
NP_065924.3 T702P	0.145	0.033	Neutral	
NP_065948.1 L545V	0.197	0.040	Neutral	
NP_065948.1 M581L	0.537	0.100	Unknown	
NP_065948.1 R766Q	0.053	0.032	Neutral	
NP_065962.1 E543Q	0.457	0.081	Unknown	
NP_065970.2 I94V	0.231	0.059	Neutral	
NP_065970.2 V368M	0.107	0.040	Neutral	
NP_065987.1 A526D	0.210	0.075	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_065987.1 E154G	0.218	0.061	Neutral	
NP_065987.1 L555I	0.112	0.033	Neutral	
NP_065987.1 N264S	0.167	0.050	Neutral	
NP_065987.1 V101L	0.488	0.078	Unknown	
NP_065988.1 N655S	0.218	0.069	Unknown	
NP_066288.2 A545G	0.165	0.061	Neutral	
NP_066921.2 A1059S	0.252	0.055	Neutral	
NP_066921.2 A332T	0.070	0.038	Neutral	
NP_066921.2 E1974G	0.244	0.061	Unknown	
NP_066921.2 H1827Y	0.815	0.077	Unknown	
NP_066921.2 M313V	0.065	0.024	Neutral	
NP_066921.2 R1871Q	0.414	0.062	Unknown	
NP_066921.2 R2005C	0.160	0.044	Neutral	
NP_066921.2 R2060H	0.195	0.122	Unknown	
NP_066921.2 R2077H	0.141	0.064	Neutral	
NP_066964.1 A550S	0.228	0.046	Neutral	
NP_066964.1 I134M	0.152	0.045	Neutral	
NP_067021.1 R246C	0.630	0.084	Unknown	
NP_067547.1 R39P	0.592	0.074	Unknown	
NP_067629.2 D282H	0.223	0.056	Neutral	
NP_067629.2 N404K	0.038	0.014	Neutral	
NP_067629.2 R384H	0.006	0.005	Neutral	
NP_067629.2 T276S	0.007	0.006	Neutral	
NP_067637.2 A138V	0.188	0.048	Neutral	
NP_067637.2 H206R	0.014	0.010	Neutral	
NP_067637.2 S284C	0.044	0.021	Neutral	
NP_067647.2 K306E	0.403	0.066	Unknown	
NP_067647.2 Q608K	0.193	0.046	Neutral	
NP_067647.2 Y432F	0.440	0.083	Unknown	
NP_068547.2 A534V	0.042	0.016	Neutral	
NP_068750.2 A113G	0.265	0.073	Unknown	
NP_068813.1 D448N	0.314	0.057	Unknown	
NP_068813.1 M285I	0.056	0.018	Neutral	
NP_071317.2 E43D	0.073	0.026	Neutral	
NP_071317.2 G156S	0.719	0.065	Unknown	
NP_071317.2 R539H	0.177	0.053	Neutral	
NP_071317.2 S31R	0.166	0.057	Neutral	
NP_071347.2 I626T	0.441	0.075	Unknown	
NP_071347.2 K596E	0.278	0.060	Unknown	
NP_071347.2 R1207Q	0.068	0.025	Neutral	
NP_071347.2 R329C	0.109	0.024	Neutral	
NP_071347.2 R387Q	0.340	0.065	Unknown	
NP_071347.2 R854H	0.118	0.042	Neutral	
NP_071442.2 A620G	0.411	0.084	Unknown	
NP_071451.2 H843R	0.255	0.066	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_071640.1 N46T	0.165	0.042	Neutral	
NP_071762.2 P682S	0.131	0.043	Neutral	
NP_071762.2 R713Q	0.157	0.044	Neutral	
NP_071900.2 A2546T	0.299	0.101	Unknown	
NP_071900.2 C475W	0.492	0.070	Unknown	
NP_071900.2 D1466E	0.146	0.040	Neutral	
NP_071900.2 E171D	0.179	0.047	Neutral	
NP_071900.2 L2617S	0.393	0.056	Unknown	
NP_071900.2 M2250I	0.163	0.051	Neutral	
NP_071900.2 M2261T	0.040	0.020	Neutral	
NP_071900.2 Y364D	0.775	0.057	Pathogenic	
NP_071919.2 P340L	0.665	0.079	Unknown	
NP_071919.2 R263H	0.461	0.087	Unknown	
NP_071939.1 D41N	0.335	0.059	Unknown	
NP_072089.1 A406G	0.030	0.014	Neutral	
NP_072089.1 D444H	0.032	0.014	Neutral	
NP_073587.1 P637Q	0.444	0.078	Unknown	
NP_073604.3 N140D	0.096	0.028	Neutral	
NP_073604.3 S88C	0.248	0.056	Neutral	
NP_073604.3 T261P	0.479	0.089	Unknown	
NP_073739.3 T565S	0.015	0.009	Neutral	
NP_075392.2 R412G	0.189	0.052	Neutral	
NP_075447.1 S854R	0.614	0.063	Unknown	
NP_075566.2 A54T	0.340	0.083	Unknown	
NP_075566.2 K162N	0.113	0.043	Neutral	
NP_076412.3 A547P	0.312	0.057	Unknown	
NP_076412.3 Q131K	0.092	0.051	Neutral	
NP_076412.3 R473G	0.523	0.085	Unknown	
NP_076431.1 V258I	0.030	0.021	Neutral	
NP_076985.4 C267W	0.538	0.074	Unknown	
NP_076985.4 E662G	0.305	0.080	Unknown	
NP_076985.4 G882C	0.865	0.041	Pathogenic	
NP_076985.4 S419N	0.065	0.028	Neutral	
NP_076985.4 T489I	0.405	0.080	Unknown	
NP_076985.4 T664A	0.108	0.031	Neutral	
NP_076985.4 Y191C	0.734	0.057	Unknown	
NP_077309.1 L232V	0.372	0.099	Unknown	
NP_077309.1 V17G	0.485	0.072	Unknown	
NP_078872.2 A761V	0.005	0.005	Neutral	
NP_078872.2 E581G	0.028	0.015	Neutral	
NP_078872.2 I264V	0.006	0.005	Neutral	
NP_078872.2 L833F	0.032	0.013	Neutral	
NP_078872.2 P288H	0.068	0.025	Neutral	
NP_078872.2 P828S	0.017	0.011	Neutral	
NP_078872.2 R304I	0.021	0.011	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_078872.2 S580G	0.014	0.008	Neutral	
NP_078872.2 S731C	0.054	0.019	Neutral	
NP_078872.2 T682N	0.079	0.023	Neutral	
NP_078872.2 Y810C	0.044	0.018	Neutral	
NP_078891.2 F578L	0.041	0.016	Neutral	
NP_078891.2 P667S	0.054	0.017	Neutral	
NP_078891.2 Q781K	0.034	0.013	Neutral	
NP_078891.2 W200L	0.057	0.019	Neutral	
NP_078928.3 G1938D	0.196	0.039	Neutral	
NP_078928.3 P1656S	0.213	0.079	Unknown	
NP_078928.3 R841G	0.797	0.058	Pathogenic	
NP_078928.3 S1858N	0.314	0.089	Unknown	
NP_078928.3 V1654G	0.356	0.083	Unknown	
NP_078945.2 G127A	0.057	0.022	Neutral	
NP_078945.2 R128P	0.137	0.038	Neutral	
NP_078968.3 R486L	0.034	0.013	Neutral	
NP_078968.3 V425F	0.018	0.011	Neutral	
NP_078984.2 R64L	0.718	0.103	Unknown	
NP_078984.2 V253G	0.627	0.086	Unknown	
NP_079033.4 A388T	0.028	0.013	Neutral	
NP_079033.4 A50T	0.196	0.070	Unknown	
NP_079033.4 P176S	0.113	0.036	Neutral	
NP_079033.4 P192L	0.403	0.119	Unknown	
NP_079033.4 P194L	0.232	0.069	Unknown	
NP_079033.4 Y857D	0.584	0.083	Unknown	
NP_079093.2 A319V	0.110	0.026	Neutral	
NP_079093.2 D389G	0.292	0.073	Unknown	
NP_079093.2 D395N	0.096	0.023	Neutral	
NP_079093.2 T665P	0.024	0.013	Neutral	
NP_079093.2 Y298D	0.160	0.037	Neutral	
NP_079108.3 G613A	0.061	0.022	Neutral	
NP_079108.3 P477S	0.215	0.062	Neutral	
NP_079108.3 R427Q	0.056	0.024	Neutral	
NP_079126.1 T143A	0.011	0.009	Neutral	
NP_079353.3 D64G	0.656	0.071	Unknown	
NP_079353.3 E381K	0.189	0.054	Neutral	
NP_079353.3 Q426K	0.030	0.016	Neutral	
NP_079353.3 R341H	0.524	0.082	Unknown	
NP_079353.3 V63G	0.551	0.074	Unknown	
NP_079410.4 F783L	0.194	0.051	Neutral	
NP_079410.4 L751M	0.263	0.074	Unknown	
NP_079410.4 Q605K	0.186	0.049	Neutral	
NP_079430.3 E393K	0.078	0.028	Neutral	
NP_079430.3 G444V	0.274	0.069	Unknown	
NP_079455.3 A805G	0.215	0.055	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_079455.3 C537W	0.827	0.064	Pathogenic	
NP_079455.3 Y1881F	0.572	0.086	Unknown	
NP_079461.2 S1147P	0.028	0.014	Neutral	
NP_079496.1 N109S	0.126	0.040	Neutral	
NP_079496.1 P336S	0.126	0.034	Neutral	
NP_079496.1 T178A	0.026	0.014	Neutral	
NP_079511.1 C1099F	0.764	0.082	Unknown	
NP_079511.1 D1165N	0.400	0.069	Unknown	
NP_079511.1 D646Y	0.942	0.022	Pathogenic	
NP_079511.1 G1121V	0.912	0.038	Pathogenic	
NP_079511.1 G559C	0.915	0.048	Pathogenic	
NP_079511.1 N50T	0.582	0.091	Unknown	
NP_079511.1 V416F	0.666	0.063	Unknown	
NP_110385.1 A297D	0.039	0.015	Neutral	
NP_110385.1 D613N	0.025	0.012	Neutral	
NP_110385.1 L137F	0.016	0.010	Neutral	
NP_110385.1 S673T	0.032	0.015	Neutral	
NP_110406.1 R385G	0.862	0.061	Pathogenic	
NP_110406.1 R715L	0.659	0.059	Unknown	
NP_110406.1 S80F	0.638	0.064	Unknown	
NP_110440.1 R295T	0.138	0.034	Neutral	
NP_112153.1 A248T	0.031	0.013	Neutral	
NP_112175.2 M441I	0.273	0.050	Neutral	
NP_112175.2 R543T	0.048	0.018	Neutral	
NP_112217.2 Q110E	0.020	0.011	Neutral	
NP_112218.2 A163S	0.299	0.061	Unknown	
NP_112218.2 G381D	0.086	0.026	Neutral	
NP_112218.2 M326T	0.745	0.066	Unknown	
NP_112218.2 R525W	0.215	0.058	Neutral	
NP_112218.2 V298I	0.052	0.031	Neutral	
NP_112477.1 I92V	0.157	0.057	Neutral	
NP_112477.1 M284V	0.123	0.053	Neutral	
NP_112562.3 N780D	0.060	0.022	Neutral	
NP_113597.2 V83I	0.393	0.089	Unknown	
NP_113607.1 E687D	0.598	0.091	Unknown	
NP_113607.1 N648S	0.366	0.070	Unknown	
NP_113607.1 P190T	0.776	0.054	Pathogenic	
NP_113607.1 S162G	0.079	0.031	Neutral	
NP_113626.1 K102E	0.237	0.054	Neutral	
NP_114142.3 L218P	0.230	0.061	Unknown	
NP_114152.3 L801V	0.337	0.064	Unknown	
NP_114434.3 F35S	0.088	0.025	Neutral	
NP_114434.3 T36P	0.305	0.073	Unknown	
NP_115515.2 E167Q	0.428	0.077	Unknown	
NP_115515.2 N984K	0.109	0.037	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_115519.2 E637V	0.095	0.046	Neutral	
NP_115597.3 A1205G	0.253	0.083	Unknown	
NP_115597.3 E2404Q	0.627	0.069	Unknown	
NP_115597.3 R131T	0.344	0.055	Unknown	
NP_115641.1 C341F	0.484	0.146	Unknown	
NP_115641.1 G415S	0.217	0.069	Unknown	
NP_115659.1 E324G	0.073	0.028	Neutral	
NP_115659.1 Y330H	0.449	0.070	Unknown	
NP_115821.2 I988T	0.077	0.035	Neutral	
NP_115822.1 C458W	0.832	0.062	Pathogenic	
NP_115822.1 K459E	0.516	0.088	Unknown	
NP_115822.1 N921I	0.543	0.066	Unknown	
NP_115822.1 R1072K	0.021	0.011	Neutral	
NP_115822.1 R1072S	0.274	0.053	Unknown	
NP_115822.1 R151Q	0.931	0.034	Pathogenic	
NP_115822.1 R349H	0.101	0.031	Neutral	
NP_115912.1 H12N	0.051	0.019	Neutral	
NP_115912.1 H12Q	0.056	0.019	Neutral	
NP_115925.2 V484M	0.201	0.045	Neutral	
NP_115940.2 A189T	0.145	0.057	Neutral	
NP_115941.2 S31F	0.537	0.052	Unknown	
NP_115960.2 E127Q	0.018	0.010	Neutral	
NP_116021.2 H683N	0.661	0.059	Unknown	
NP_116021.2 L711F	0.291	0.060	Unknown	
NP_116021.2 Q14H	0.284	0.073	Unknown	
NP_116021.2 T598P	0.418	0.106	Unknown	
NP_116176.2 K151E	0.037	0.024	Neutral	
NP_116743.1 A12P	0.616	0.078	Unknown	
NP_150232.2 A42T	0.007	0.006	Neutral	
NP_150232.2 I29V	0.005	0.004	Neutral	
NP_150232.2 L235V	0.057	0.022	Neutral	
NP_150232.2 T139M	0.004	0.004	Neutral	
NP_150375.2 G958A	0.081	0.027	Neutral	
NP_150377.1 P694S	0.446	0.103	Unknown	
NP_150377.1 P834A	0.095	0.032	Neutral	
NP_150377.1 Q103E	0.062	0.022	Neutral	
NP_150377.1 R893W	0.149	0.047	Neutral	
NP_203752.2 N251S	0.087	0.031	Neutral	
NP_208325.3 H69Q	0.647	0.056	Unknown	
NP_291027.3 D464E	0.276	0.093	Unknown	
NP_439893.2 Q210L	0.057	0.023	Neutral	
NP_443098.3 V131F	0.034	0.021	Neutral	
NP_443199.1 M109L	0.058	0.022	Neutral	
NP_443723.2 C426W	0.109	0.051	Neutral	
NP_443723.2 R411M	0.107	0.038	Neutral	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_444508.1 D328A	0.023	0.010	Neutral	
NP_444508.1 S153N	0.014	0.008	Neutral	
NP_473361.1 V148G	0.330	0.087	Unknown	
NP_473372.3 C82R	0.012	0.009	Neutral	
NP_478067.2 P381S	0.024	0.010	Neutral	
NP_478067.2 V39F	0.047	0.016	Neutral	
NP_510961.1 R124C	0.053	0.017	Neutral	
NP_510966.1 R367W	0.215	0.077	Unknown	
NP_536349.2 G708R	0.195	0.085	Unknown	
NP_542164.2 N165K	0.230	0.037	Neutral	
NP_542164.2 V636L	0.243	0.053	Neutral	
NP_543016.1 L105F	0.112	0.033	Neutral	
NP_543016.1 P193R	0.097	0.027	Neutral	
NP_543016.1 S102P	0.169	0.037	Neutral	
NP_543137.2 S171L	0.563	0.124	Unknown	
NP_543139.4 A234T	0.517	0.093	Unknown	
NP_543139.4 N294S	0.289	0.059	Unknown	
NP_543139.4 Q63H	0.074	0.025	Neutral	
NP_543139.4 R428W	0.413	0.096	Unknown	
NP_543148.2 V393G	0.547	0.098	Unknown	
NP_543148.2 V547I	0.165	0.047	Neutral	
NP_543150.1 C167S	0.304	0.051	Unknown	
NP_563616.3 E58K	0.152	0.043	Neutral	
NP_563616.3 G357A	0.168	0.050	Neutral	
NP_563616.3 M411T	0.308	0.071	Unknown	
NP_569059.2 G206D	0.158	0.044	Neutral	
NP_570718.1 I604V	0.119	0.041	Neutral	
NP_570718.1 N260S	0.335	0.107	Unknown	
NP_588610.2 P471S	0.890	0.054	Pathogenic	
NP_588610.2 V570I	0.175	0.053	Neutral	
NP_597707.1 A404T	0.008	0.006	Neutral	
NP_597707.1 G25E	0.072	0.024	Neutral	
NP_597707.1 M631T	0.053	0.018	Neutral	
NP_597707.1 R654Q	0.045	0.017	Neutral	
NP_597725.1 G194S	0.851	0.075	Pathogenic	
NP_597732.1 A66T	0.012	0.007	Neutral	
NP_597732.1 E585K	0.006	0.005	Neutral	
NP_597732.1 R349Q	0.016	0.009	Neutral	
NP_598004.1 E20K	0.307	0.058	Unknown	
NP_598004.1 F355L	0.187	0.054	Neutral	
NP_598004.1 N536S	0.225	0.057	Neutral	
NP_598377.3 C580F	0.086	0.028	Neutral	
NP_598377.3 L474F	0.126	0.045	Neutral	
NP_598377.3 T1194I	0.322	0.069	Unknown	
NP_598377.3 Y1089F	0.181	0.041	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_612152.1 N118Y	0.172	0.039	Neutral	
NP_612152.1 P71A	0.166	0.031	Neutral	
NP_612152.1 R1053P	0.047	0.034	Neutral	
NP_612152.1 T2038S	0.027	0.015	Neutral	
NP_612411.4 M88T	0.138	0.041	Neutral	
NP_612411.4 P377S	0.062	0.025	Neutral	
NP_612411.4 T225M	0.031	0.017	Neutral	
NP_612449.2 F96S	0.110	0.036	Neutral	
NP_612454.1 G11E	0.062	0.022	Neutral	
NP_612454.1 V266M	0.028	0.014	Neutral	
NP_612564.1 E287G	0.723	0.048	Pathogenic	
NP_612564.1 L470F	0.787	0.054	Pathogenic	
NP_612564.1 T399I	0.753	0.049	Pathogenic	
NP_612564.1 Y46C	0.514	0.068	Unknown	
NP_619542.1 M10V	0.158	0.078	Unknown	
NP_619723.1 A692T	0.482	0.073	Unknown	
NP_619723.1 S336L	0.914	0.036	Pathogenic	
NP_620124.1 A533T	0.220	0.051	Neutral	
NP_620414.1 S40G	0.015	0.009	Neutral	
NP_620414.1 T178P	0.111	0.041	Neutral	
NP_620594.1 A1033T	0.414	0.072	Unknown	
NP_620594.1 A732V	0.183	0.049	Neutral	
NP_620594.1 E634K	0.402	0.088	Unknown	
NP_620594.1 E740K	0.219	0.085	Unknown	
NP_620594.1 G982R	0.066	0.031	Neutral	
NP_620594.1 H5Q	0.180	0.054	Neutral	
NP_620594.1 P457L	0.774	0.052	Pathogenic	
NP_620594.1 Q456H	0.360	0.071	Unknown	
NP_620594.1 R625H	0.392	0.083	Unknown	
NP_620594.1 T1226I	0.185	0.058	Neutral	
NP_620594.1 V604I	0.501	0.099	Unknown	
NP_620594.1 V832M	0.236	0.064	Unknown	
NP_620636.1 E362Q	0.059	0.023	Neutral	
NP_620636.1 I762V	0.361	0.093	Unknown	
NP_620636.1 N311S	0.250	0.057	Unknown	
NP_620636.1 R819H	0.184	0.068	Neutral	
NP_620686.1 G235S	0.559	0.096	Unknown	
NP_620686.1 S575A	0.036	0.015	Neutral	
NP_620687.2 A486T	0.067	0.023	Neutral	
NP_620687.2 P211S	0.031	0.014	Neutral	
NP_620687.2 R1158W	0.179	0.051	Neutral	
NP_620687.2 V125L	0.023	0.012	Neutral	
NP_620687.2 V734I	0.040	0.023	Neutral	
NP_631875.1 E549D	0.095	0.036	Neutral	
NP_631894.2 D184N	0.319	0.062	Unknown	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_631894.2 E1052G	0.016	0.009	Neutral	
NP_631894.2 H79Y	0.028	0.014	Neutral	
NP_631894.2 L593P	0.112	0.038	Neutral	
NP_631894.2 P534H	0.274	0.058	Unknown	
NP_631894.2 R179C	0.791	0.070	Unknown	
NP_631894.2 R330C	0.773	0.083	Unknown	
NP_631894.2 R879H	0.320	0.072	Unknown	
NP_631894.2 S1020N	0.340	0.064	Unknown	
NP_647537.1 D303A	0.073	0.025	Neutral	
NP_647537.1 I426T	0.419	0.073	Unknown	
NP_647537.1 M1323I	0.144	0.034	Neutral	
NP_647537.1 T1185N	0.461	0.054	Unknown	
NP_647537.1 T714P	0.576	0.076	Unknown	
NP_647537.1 V1226I	0.082	0.033	Neutral	
NP_653234.2 E984Q	0.229	0.050	Neutral	
NP_653234.2 N1102K	0.117	0.036	Neutral	
NP_653234.2 N897T	0.160	0.037	Neutral	
NP_653234.2 P989S	0.227	0.111	Unknown	
NP_653234.2 Q893R	0.345	0.066	Unknown	
NP_653242.2 R81W	0.763	0.057	Pathogenic	
NP_653242.2 V281I	0.085	0.031	Neutral	
NP_653249.1 C743R	0.034	0.021	Neutral	
NP_653249.1 D302Y	0.054	0.020	Neutral	
NP_653249.1 D584V	0.126	0.038	Neutral	
NP_653249.1 G297V	0.453	0.106	Unknown	
NP_653249.1 I252V	0.090	0.026	Neutral	
NP_653249.1 M635I	0.024	0.013	Neutral	
NP_653249.1 P399L	0.405	0.078	Unknown	
NP_653249.1 R433C	0.131	0.033	Neutral	
NP_653249.1 R552H	0.101	0.033	Neutral	
NP_653249.1 S740F	0.011	0.007	Neutral	
NP_653249.1 Y630C	0.023	0.011	Neutral	
NP_653252.3 L194V	0.244	0.058	Unknown	
NP_653252.3 V1327D	0.037	0.014	Neutral	
NP_653299.3 E286G	0.033	0.014	Neutral	
NP_653299.3 K301E	0.029	0.015	Neutral	
NP_653299.3 P293L	0.019	0.013	Neutral	
NP_653299.3 P428S	0.018	0.010	Neutral	
NP_653299.3 R592Q	0.008	0.006	Neutral	
NP_653299.3 W300G	0.049	0.020	Neutral	
NP_659002.1 A131S	0.468	0.094	Unknown	
NP_659441.3 M668T	0.068	0.033	Neutral	
NP_659441.3 S753N	0.187	0.039	Neutral	
NP_659486.2 Q289K	0.281	0.045	Neutral	
NP_660299.2 R199P	0.113	0.081	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_660333.2 V1166G	0.095	0.035	Neutral	
NP_665741.1 R181W	0.059	0.024	Neutral	
NP_665741.1 T156I	0.007	0.006	Neutral	
NP_665862.1 E84D	0.185	0.053	Neutral	
NP_665862.1 L57V	0.170	0.060	Neutral	
NP_665872.2 K141R	0.104	0.027	Neutral	
NP_665872.2 Q407H	0.053	0.019	Neutral	
NP_667340.2 E45Q	0.187	0.042	Neutral	
NP_683765.1 L407V	0.039	0.015	Neutral	
NP_689542.2 I96N	0.104	0.028	Neutral	
NP_689542.2 Y406F	0.156	0.030	Neutral	
NP_689576.4 A31T	0.034	0.016	Neutral	
NP_689576.4 A428T	0.019	0.011	Neutral	
NP_689576.4 L94Q	0.066	0.021	Neutral	
NP_689576.4 R494Q	0.306	0.130	Unknown	
NP_689576.4 T311P	0.014	0.009	Neutral	
NP_689576.4 V447M	0.024	0.011	Neutral	
NP_689660.2 T112N	0.086	0.025	Neutral	
NP_689760.2 G132A	0.028	0.013	Neutral	
NP_689760.2 G511R	0.020	0.012	Neutral	
NP_689766.1 V89I	0.125	0.032	Neutral	
NP_689833.1 E222V	0.013	0.007	Neutral	
NP_689848.1 C105F	0.470	0.112	Unknown	
NP_689848.1 N371K	0.089	0.025	Neutral	
NP_689931.2 P539A	0.030	0.013	Neutral	
NP_689967.2 I676T	0.104	0.030	Neutral	
NP_690850.2 M481L	0.143	0.048	Neutral	
NP_690850.2 P1067R	0.259	0.064	Unknown	
NP_690850.2 P151L	0.201	0.048	Neutral	
NP_690864.2 E346G	0.768	0.053	Pathogenic	
NP_694591.2 E582K	0.129	0.037	Neutral	
NP_694591.2 F1278C	0.891	0.036	Pathogenic	
NP_694591.2 L632F	0.544	0.085	Unknown	
NP_694591.2 P111L	0.208	0.068	Unknown	
NP_694591.2 R99C	0.077	0.024	Neutral	
NP_694591.2 S631F	0.723	0.053	Unknown	
NP_694591.2 V1172I	0.365	0.071	Unknown	
NP_694591.2 V509G	0.553	0.099	Unknown	
NP_694591.2 Y963F	0.415	0.062	Unknown	
NP_699163.2 S232F	0.607	0.063	Unknown	
NP_700356.2 L1050V	0.027	0.011	Neutral	
NP_705717.1 P368L	0.652	0.102	Unknown	
NP_720198.1 E285V	0.802	0.091	Unknown	
NP_720198.1 R516Q	0.167	0.052	Neutral	
NP_722576.3 I276M	0.043	0.020	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_722576.3 S1540P	0.259	0.043	Neutral	
NP_722576.3 T1213N	0.113	0.027	Neutral	
NP_722580.3 K541N	0.157	0.049	Neutral	
NP_722580.3 S393P	0.071	0.028	Neutral	
NP_722580.3 S591R	0.333	0.065	Unknown	
NP_722581.4 I399V	0.256	0.058	Unknown	
NP_722581.4 L256M	0.086	0.026	Neutral	
NP_722581.4 M429R	0.291	0.056	Unknown	
NP_722581.4 Q80R	0.010	0.007	Neutral	
NP_722581.4 S49P	0.271	0.058	Unknown	
NP_722581.4 V599L	0.093	0.027	Neutral	
NP_734465.2 R401H	0.969	0.016	Pathogenic	
NP_734465.2 T341M	0.250	0.070	Unknown	
NP_742068.1 P935A	0.337	0.067	Unknown	
NP_742068.1 Q713E	0.376	0.075	Unknown	
NP_775105.1 I1642T	0.631	0.093	Unknown	
NP_775733.3 A191T	0.018	0.012	Neutral	
NP_775733.3 A646T	0.084	0.032	Neutral	
NP_775733.3 D313N	0.155	0.035	Neutral	
NP_775733.3 G869R	0.050	0.022	Neutral	
NP_775733.3 H601R	0.026	0.016	Neutral	
NP_775733.3 Q696H	0.027	0.014	Neutral	
NP_775733.3 R595W	0.033	0.015	Neutral	
NP_775733.3 T1174M	0.335	0.081	Unknown	
NP_775733.3 V416I	0.021	0.011	Neutral	
NP_775733.3 V974M	0.034	0.017	Neutral	
NP_775767.2 R453W	0.945	0.025	Pathogenic	
NP_775822.3 P735A	0.066	0.028	Neutral	
NP_775839.3 E1243K	0.188	0.049	Neutral	
NP_775841.2 K247R	0.029	0.013	Neutral	
NP_775841.2 R165H	0.151	0.078	Neutral	
NP_775866.2 D198E	0.047	0.017	Neutral	
NP_776162.2 G16S	0.023	0.013	Neutral	
NP_776162.2 P134T	0.058	0.023	Neutral	
NP_778226.1 A237D	0.073	0.028	Neutral	
NP_778226.1 N45S	0.045	0.017	Neutral	
NP_778226.1 Q236K	0.010	0.007	Neutral	
NP_778226.1 T213A	0.059	0.024	Neutral	
NP_778236.2 E575Q	0.184	0.052	Neutral	
NP_778237.1 A228V	0.043	0.019	Neutral	
NP_778237.1 C291Y	0.018	0.013	Neutral	
NP_778237.1 G165S	0.049	0.028	Neutral	
NP_778237.1 V265I	0.007	0.006	Neutral	
NP_783297.2 R1003C	0.552	0.088	Unknown	
NP_795713.2 T179M	0.067	0.025	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_821138.1 D273G	0.264	0.074	Unknown	
NP_821138.1 N204K	0.045	0.019	Neutral	
NP_839943.2 A1124T	0.314	0.066	Unknown	
NP_839943.2 V410L	0.696	0.078	Unknown	
NP_848605.1 G318R	0.027	0.016	Neutral	
NP_848605.1 P276L	0.107	0.038	Neutral	
NP_848605.1 R445C	0.062	0.022	Neutral	
NP_848605.1 S111P	0.026	0.012	Neutral	
NP_848605.1 T595I	0.174	0.046	Neutral	
NP_848638.2 L193V	0.721	0.076	Unknown	
NP_848651.2 N465T	0.024	0.011	Neutral	
NP_848651.2 Y387S	0.229	0.057	Neutral	
NP_853509.1 G87S	0.398	0.097	Unknown	
NP_853509.1 P363S	0.488	0.089	Unknown	
NP_858043.1 A79S	0.170	0.056	Neutral	
NP_859077.1 T152S	0.010	0.007	Neutral	
NP_861455.1 R124Q	0.017	0.010	Neutral	
NP_861463.1 G170S	0.391	0.076	Unknown	
NP_861463.1 G516S	0.058	0.022	Neutral	
NP_861463.1 G52A	0.799	0.051	Pathogenic	
NP_861463.1 T473M	0.302	0.087	Unknown	
NP_861463.1 V521I	0.081	0.027	Neutral	
NP_861463.1 V80M	0.391	0.084	Unknown	
NP_872293.2 A208T	0.038	0.018	Neutral	
NP_872293.2 E542A	0.086	0.022	Neutral	
NP_872293.2 R425Q	0.082	0.026	Neutral	
NP_872293.2 T213P	0.018	0.010	Neutral	
NP_872293.2 T309A	0.008	0.006	Neutral	
NP_872308.2 T348S	0.072	0.036	Neutral	
NP_872414.3 Q257R	0.017	0.009	Neutral	
NP_874358.2 R391M	0.025	0.011	Neutral	
NP_874358.2 V62A	0.035	0.014	Neutral	
NP_874362.3 A141V	0.079	0.023	Neutral	
NP_874362.3 E120Q	0.011	0.007	Neutral	
NP_874362.3 R87C	0.004	0.005	Neutral	
NP_877434.2 E15G	0.112	0.038	Neutral	
NP_878911.1 E612G	0.686	0.070	Unknown	
NP_878911.1 P333L	0.812	0.055	Pathogenic	
NP_878911.1 R152P	0.660	0.063	Unknown	
NP_878911.1 T390R	0.580	0.077	Unknown	
NP_878919.2 A194T	0.295	0.089	Unknown	
NP_878919.2 D16E	0.547	0.068	Unknown	
NP_878919.2 T484M	0.187	0.062	Neutral	
NP_891550.1 D1674E	0.041	0.023	Neutral	
NP_892030.3 A190V	0.049	0.025	Neutral	





Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_892030.3 K104R	0.104	0.039	Neutral	
NP_892030.3 N239K	0.250	0.087	Unknown	
NP_898868.1 L436P	0.277	0.116	Unknown	
NP_898868.1 V563L	0.022	0.012	Neutral	
NP_899067.1 P113L	0.139	0.050	Neutral	
NP_899067.1 P176L	0.205	0.042	Neutral	
NP_919288.2 A955T	0.005	0.005	Neutral	
NP_919288.2 R167Q	0.024	0.014	Neutral	
NP_919288.2 R5Q	0.033	0.014	Neutral	
NP_919288.2 R653W	0.011	0.007	Neutral	
NP_919288.2 V508L	0.008	0.006	Neutral	
NP_919288.2 V610M	0.029	0.015	Neutral	
NP_919288.2 V761A	0.006	0.006	Neutral	
NP_932079.1 F11L	0.109	0.036	Neutral	
NP_932079.1 P399A	0.030	0.014	Neutral	
NP_932079.1 Q426E	0.029	0.018	Neutral	
NP_932079.1 S397R	0.032	0.014	Neutral	
NP_932162.1 E281K	0.107	0.033	Neutral	
NP_932341.1 P359Q	0.011	0.007	Neutral	
NP_937770.1 D436N	0.270	0.089	Unknown	
NP_937770.1 I162V	0.059	0.028	Neutral	
NP_937770.1 L124F	0.134	0.040	Neutral	
NP_937882.1 N196I	0.060	0.032	Neutral	
NP_937882.1 R78C	0.019	0.014	Neutral	
NP_937882.1 V122L	0.012	0.008	Neutral	
NP_940912.1 G387R	0.027	0.012	Neutral	
NP_940980.3 C463W	0.866	0.052	Pathogenic	
NP_940980.3 D944Y	0.522	0.065	Unknown	
NP_940980.3 G2385R	0.632	0.063	Unknown	
NP_940980.3 I723V	0.496	0.077	Unknown	
NP_940980.3 L582P	0.770	0.048	Pathogenic	
NP_940980.3 M1646T	0.760	0.045	Pathogenic	
NP_940980.3 N551K	0.821	0.060	Pathogenic	
NP_940980.3 P755L	0.608	0.062	Unknown	
NP_940980.3 R1398H	0.539	0.062	Unknown	
NP_940980.3 S1647T	0.425	0.078	Unknown	
NP_940980.3 V44L	0.560	0.063	Unknown	
NP_940980.3 Y2346C	0.725	0.060	Unknown	
NP_940983.2 D166G	0.040	0.016	Neutral	
NP_940983.2 K226R	0.050	0.020	Neutral	
NP_940983.2 L221F	0.021	0.015	Neutral	
NP_940983.2 Y588C	0.086	0.020	Neutral	
NP_942090.1 E843K	0.662	0.080	Unknown	
NP_942090.1 I245V	0.035	0.015	Neutral	
NP_942090.1 M470T	0.064	0.024	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
NP_942090.1 N83S	0.059	0.025	Neutral	
NP_942122.2 P259Q	0.095	0.028	Neutral	
NP_942122.2 V184I	0.058	0.023	Neutral	
NP_945314.1 K256E	0.058	0.019	Neutral	
NP_945314.1 S465F	0.118	0.035	Neutral	
NP_954993.1 P133A	0.010	0.006	Neutral	
NP_955387.1 L293F	0.345	0.079	Unknown	
NP_955387.1 R213W	0.140	0.042	Neutral	
NP_955452.3 H1545Q	0.071	0.027	Neutral	
NP_955452.3 L2538V	0.476	0.080	Unknown	
NP_955452.3 P1056L	0.088	0.037	Neutral	
NP_955452.3 R1953Q	0.072	0.031	Neutral	
NP_955452.3 R516C	0.121	0.038	Neutral	
NP_963890.2 R659C	0.696	0.075	Unknown	
NP_963921.1 S495C	0.125	0.037	Neutral	
NP_963921.1 Y506H	0.376	0.079	Unknown	
NP_963923.1 D482E	0.104	0.036	Neutral	
NP_963923.1 G355R	0.929	0.051	Pathogenic	
NP_963923.1 L937P	0.939	0.032	Pathogenic	
NP_963923.1 Q879R	0.781	0.083	Unknown	
NP_963923.1 S1012R	0.756	0.054	Pathogenic	
NP_963923.1 S711P	0.275	0.053	Unknown	
NP_996829.3 N1490I	0.054	0.037	Neutral	
NP_996829.3 Q810E	0.152	0.049	Neutral	
NP_997056.1 C197F	0.353	0.075	Unknown	
NP_997056.1 E7D	0.012	0.008	Neutral	
NP_997056.1 N107I	0.073	0.027	Neutral	
NP_997056.1 R122Q	0.083	0.023	Neutral	
NP_997056.1 S143G	0.130	0.035	Neutral	
NP_997056.1 T212I	0.163	0.050	Neutral	
NP_997186.1 C961G	0.177	0.042	Neutral	
NP_997186.1 C961W	0.207	0.069	Unknown	
NP_997186.1 G1163S	0.174	0.054	Neutral	
NP_997186.1 S989N	0.005	0.004	Neutral	
NP_997224.2 T531P	0.275	0.049	Neutral	
NP_997400.2 H146R	0.006	0.005	Neutral	
NP_997400.2 L21F	0.017	0.012	Neutral	
NP_997400.2 L869F	0.024	0.013	Neutral	
NP_997400.2 R1679H	0.019	0.010	Neutral	
NP_997400.2 T1370A	0.046	0.024	Neutral	
NP_997400.2 V247G	0.109	0.033	Neutral	
NP_997400.2 V661L	0.006	0.005	Neutral	
P04839 A156T	0.361	0.119	Unknown	
P04839 A224G	0.121	0.039	Neutral	
P04839 A55D	0.923	0.034	Pathogenic	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P30518 A132D	0.851	0.052	Pathogenic	
P30518 A294P	0.324	0.063	Unknown	
P30518 A84D	0.834	0.058	Pathogenic	
P30518 C112R	0.744	0.080	Unknown	
P30518 C112Y	0.757	0.081	Unknown	
P30518 D191G	0.554	0.099	Unknown	
P30518 D85N	0.455	0.108	Unknown	
P30518 F105V	0.651	0.076	Unknown	
P30518 F214S	0.620	0.131	Unknown	
P30518 G107E	0.831	0.064	Pathogenic	
P30518 G122R	0.852	0.074	Pathogenic	
P30518 G185C	0.170	0.061	Neutral	
P30518 G201D	0.883	0.062	Pathogenic	
P30518 H80R	0.760	0.067	Unknown	
P30518 I130F	0.570	0.106	Unknown	
P30518 I209F	0.519	0.104	Unknown	
P30518 I46K	0.184	0.044	Neutral	
P30518 L135P	0.740	0.127	Unknown	
P30518 L219P	0.301	0.120	Unknown	
P30518 L219R	0.294	0.094	Unknown	
P30518 L43P	0.723	0.141	Unknown	
P30518 L44P	0.829	0.095	Unknown	
P30518 L53R	0.726	0.090	Unknown	
P30518 L59P	0.723	0.141	Unknown	
P30518 L62P	0.709	0.115	Unknown	
P30518 L81F	0.299	0.119	Unknown	
P30518 L83P	0.692	0.131	Unknown	
P30518 L83Q	0.588	0.091	Unknown	
P30518 L94Q	0.596	0.093	Unknown	
P30518 M123K	0.756	0.091	Unknown	
P30518 M272K	0.810	0.069	Pathogenic	
P30518 N55D	0.267	0.121	Unknown	
P30518 N55H	0.282	0.064	Unknown	
P30518 P173S	0.675	0.094	Unknown	
P30518 P217T	0.502	0.091	Unknown	
P30518 P286L	0.298	0.058	Unknown	
P30518 P286R	0.242	0.065	Unknown	
P30518 P286S	0.264	0.079	Unknown	
P30518 P322H	0.475	0.069	Unknown	
P30518 P322S	0.424	0.056	Unknown	
P30518 P95L	0.695	0.111	Unknown	
P30518 Q174L	0.496	0.116	Unknown	
P30518 Q92R	0.179	0.071	Neutral	
P30518 R104C	0.863	0.054	Pathogenic	
P30518 R106C	0.091	0.039	Neutral	



Submission	Probability for pathogenicity	Standard error	Prediction	Annotation(s)
P30518 R113W	0.835	0.066	Pathogenic	
P30518 R137C	0.863	0.054	Pathogenic	
P30518 R137H	0.774	0.111	Unknown	
P30518 R137L	0.700	0.087	Unknown	
P30518 R143P	0.808	0.072	Unknown	
P30518 R181C	0.808	0.105	Unknown	
P30518 R202C	0.451	0.083	Unknown	
P30518 R203C	0.645	0.127	Unknown	
P30518 S126F	0.637	0.089	Unknown	
P30518 S127F	0.375	0.088	Unknown	
P30518 S167L	0.862	0.064	Pathogenic	
P30518 S167T	0.303	0.096	Unknown	
P30518 T204N	0.462	0.061	Unknown	
P30518 T207N	0.701	0.099	Unknown	
P30518 W164S	0.258	0.058	Unknown	
P30518 V206D	0.765	0.059	Pathogenic	
P30518 W323R	0.345	0.071	Unknown	
P30518 W323S	0.364	0.062	Unknown	
P30518 V88M	0.548	0.098	Unknown	
P30518 W99R	0.818	0.071	Pathogenic	
P30518 Y128S	0.545	0.086	Unknown	
P30518 Y205C	0.543	0.116	Unknown	
P30518 Y280C	0.797	0.061	Pathogenic	
P04000 C203R	0.358	0.077	Unknown	
P04000 P307L	0.340	0.141	Unknown	
NP_000045.1 A42V	0.462	0.089	Unknown	
NP_000045.1 T7S	0.029	0.015	Neutral	
NP_000677.2 R248K	0.113	0.040	Neutral	
NP_002427.1 S210F	0.568	0.128	Unknown	
NP_004970.3 R420W	0.900	0.041	Pathogenic	
NP_004970.3 S531A	0.139	0.056	Neutral	
NP_005384.2 E1651A	0.156	0.048	Neutral	
NP_005384.2 M1535T	0.026	0.014	Neutral	
NP_064445.1 S116Y	0.039	0.017	Neutral	
NP_112219.2 T134S	0.319	0.044	Unknown	

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