

Table S1. Orthologs of voltage-gated ion channel genes in human, rat, and mouse

Human gene name	Human nucleotide RefSeq	Rat gene name	Rat nucleotide RefSeq	Mouse gene name	Mouse nucleotide RefSeq
<i>KCNMA1</i>	NM_001014797	<i>Kcnma1</i>	NM_031828	<i>Kcnma1</i>	NM_010610
<i>KCNN1</i>	NM_002248	<i>Kcnn1</i>	NM_019313	<i>Kcnn1</i>	NM_032397
<i>KCNN2</i>	NM_170775	<i>Kcnn2</i>	NM_019314	<i>Kcnn2</i>	NM_080465
<i>KCNN3</i>	NM_002249	<i>Kcnn3</i>	NM_019315	<i>Kcnn3</i>	NM_080466
<i>KCNN4</i>	NM_002250	<i>Kcnn4</i>	NM_023021	<i>Kcnn4</i>	NM_008433
<i>KCNT1</i>	NM_020822	<i>Kcnt1</i>	NM_021853	<i>Kcnt1</i>	NM_175462
<i>KCNT2</i>	NM_198503	<i>Kcnt2</i>	NM_198762	<i>Kcnt2</i>	NM_001081027
<i>KCNU1</i>	NM_001031836	<i>Kcnu1</i>		<i>Kcnu1</i>	NM_008432
<i>CATSPER1</i>	NM_053054	<i>Catsper1</i>		<i>Catsper1</i>	NM_139301
<i>CATSPER2</i>	NM_172097	<i>Catsper2</i>	NM_001012220	<i>Catsper2</i>	NM_153075
<i>CATSPER3</i>	NM_178019	<i>Catsper3</i>	NM_001106101	<i>Catsper3</i>	NM_029772
<i>CATSPER4</i>	NM_198137	<i>Catsper4</i>		<i>Catsper4</i>	NM_177866
<i>TPCN1</i>	NM_017901	<i>Tpcn1</i>	NM_139332	<i>Tpcn1</i>	NM_145853
<i>TPCN2</i>	NM_139075	<i>Tpcn2</i>	NM_001107566	<i>Tpcn2</i>	NM_146206
<i>CNGA1</i>	NM_000087	<i>Cnga1</i>	NM_053497	<i>Cnga1</i>	NM_007723
<i>CNGA2</i>	NM_005140	<i>Cnga2</i>	NM_012928	<i>Cnga2</i>	NM_007724
<i>CNGA3</i>	NM_001298	<i>Cnga3</i>	NM_053495	<i>Cnga3</i>	NM_009918
<i>CNGA4</i>	NM_001037329	<i>Cnga4</i>	NM_053496	<i>Cnga4</i>	NM_001033317
<i>CNGB1</i>	NM_001297	<i>Cngb1</i>	NM_031809	<i>Cngb1</i>	NM_001195413
<i>CNGB3</i>	NM_019098	<i>Cngb3</i>		<i>Cngb3</i>	NM_013927
<i>HCN1</i>	NM_021072	<i>Hcn1</i>	NM_053375	<i>Hcn1</i>	NM_010408
<i>HCN2</i>	NM_001194	<i>Hcn2</i>	NM_053684	<i>Hcn2</i>	NM_008226
<i>HCN3</i>	NM_020897	<i>Hcn3</i>	NM_053685	<i>Hcn3</i>	NM_008227
<i>HCN4</i>	NM_005477	<i>Hcn4</i>	NM_021658	<i>Hcn4</i>	NM_001081192
<i>KCNJ1</i>	NM_000220	<i>Kcnj1</i>	NM_017023	<i>Kcnj1</i>	NM_019659
<i>KCNJ2</i>	NM_000891	<i>Kcnj2</i>	NM_017296	<i>Kcnj2</i>	NM_008425
<i>KCNJ12</i>	NM_021012	<i>Kcnj12</i>	NM_053981	<i>Kcnj12</i>	NM_010603
<i>KCNJ4</i>	NM_152868	<i>Kcnj4</i>	NM_053870	<i>Kcnj4</i>	NM_008427
<i>KCNJ14</i>	NM_170720	<i>Kcnj14</i>	NM_170718	<i>Kcnj14</i>	NM_145963
<i>KCNJ3</i>	NM_002239	<i>Kcnj3</i>	NM_031610	<i>Kcnj3</i>	NM_008426
<i>KCNJ6</i>	NM_002240	<i>Kcnj6</i>	NM_013192	<i>Kcnj6</i>	NM_010606
<i>KCNJ9</i>	NM_004983	<i>Kcnj9</i>	NM_053834	<i>Kcnj9</i>	NM_008429
<i>KCNJ5</i>	NM_000890	<i>Kcnj5</i>	NM_017297	<i>Kcnj5</i>	NM_010605
<i>KCNJ10</i>	NM_002241	<i>Kcnj10</i>	NM_031602	<i>Kcnj10</i>	NM_001039484
<i>KCNJ15</i>	NM_170736	<i>Kcnj15</i>	NM_133321	<i>Kcnj15</i>	NM_001039057
<i>KCNJ16</i>	NM_018658	<i>Kcnj16</i>	NM_053314	<i>Kcnj16</i>	NM_010604
<i>KCNJ8</i>	NM_004982	<i>Kcnj8</i>	NM_017099	<i>Kcnj8</i>	NM_008428
<i>KCNJ11</i>	NM_000525	<i>Kcnj11</i>	NM_031358	<i>Kcnj11</i>	NM_010602
<i>KCNJ13</i>	NM_002242	<i>Kcnj13</i>	NM_053608	<i>Kcnj13</i>	NM_001110227

TRPA1	NM_007332	Trpa1	NM_207608	Trpa1	NM_177781
TRPC1	NM_003304	Trpc1	NM_053558	Trpc1	NM_011643
TRPC2		Trpc2		Trpc2	NM_011644
TRPC3	NM_003305	Trpc3	NM_021771	Trpc3	NM_019510
TRPC4	NM_016179	Trpc4	NM_080396	Trpc4	NM_016984
TRPC5	NM_012471	Trpc5	NM_080898	Trpc5	NM_009428
TRPC6	NM_004621	Trpc6	NM_053559	Trpc6	NM_013838
TRPC7	NM_020389	Trpc7	NM_001191691	Trpc7	NM_012035
TRPM1	NM_002420	Trpm1	NM_001037734	Trpm1	NM_018752
TRPM2	NM_003307	Trpm2	NM_001011559	Trpm2	NM_138301
TRPM3	NM_020952	Trpm3	XM_219902	Trpm3	NM_001035239
TRPM4	NM_017636	Trpm4	NM_001136229	Trpm4	NM_175130
TRPM5	NM_014555	Trpm5	NM_001191896	Trpm5	NM_020277
TRPM6	NM_017662	Trpm6	XM_219747	Trpm6	NM_153417
TRPM7	NM_017672	Trpm7	XM_001056331	Trpm7	NM_021450
TRPM8	NM_024080	Trpm8	NM_134371	Trpm8	NM_134252
MCOLN1	NM_020533	Mcoln1	NM_001105903	Mcoln1	NM_053177
MCOLN2	NM_153259	Mcoln2	NM_001039005	Mcoln2	NM_001005846
MCOLN3	NM_018298	Mcoln3	NM_001012059	Mcoln3	NM_134160
PKD2	NM_000297	Pkd2	NM_001191934	Pkd2	NM_008861
PKD2L1	NM_016112	Pkd2l1	NM_001106352	Pkd2l1	NM_181422
PKD2L2	NM_014386	Pkd2l2	NM_001106156	Pkd2l2	NM_016927
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TRPV2	NM_016113	Trpv2	NM_017207	Trpv2	NM_011706
TRPV3	NM_145068	Trpv3	NM_001025757	Trpv3	NM_145099
TRPV4	NM_021625	Trpv4	NM_023970	Trpv4	NM_022017
TRPV5	NM_019841	Trpv5	NM_053787	Trpv5	NM_001007572
TRPV6	NM_018646	Trpv6	NM_053686	Trpv6	NM_022413
KCNK1	NM_002245	Kcnk1	NM_021688	Kcnk1	NM_008430
KCNK2	NM_001017424	Kcnk2	NM_172042	Kcnk2	NM_010607
KCNK3	NM_002246	Kcnk3	NM_033376	Kcnk3	NM_010608
KCNK4	NM_033310	Kcnk4	NM_053804	Kcnk4	NM_008431
KCNK5	NM_003740	Kcnk5	NM_001039516	Kcnk5	NM_021542
KCNK6	NM_004823	Kcnk6	NM_053806	Kcnk6	NM_001033525
KCNK7	NM_033347	RGD1565025		Kcnk7	NM_010609
KCNK9	NM_016601	Kcnk9	NM_053405	Kcnk9	NM_001033876
KCNK10	NM_021161	Kcnk10	NM_023096	Kcnk10	NM_029911
KCNK12	NM_022055	Kcnk12	NM_022292	Kcnk12	NM_199251
KCNK13	NM_022054	Kcnk13	NM_022293	Kcnk13	NM_146037
KCNK15	NM_022358	Kcnk15	NM_130813	Kcnk15	NM_001030292
KCNK16	NM_032115	Kcnk16	NM_001109520	Kcnk16	NM_029006
KCNK17	NM_031460				
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<i>CACNA1C</i>	NM_000719	<i>Cacna1c</i>	NM_012517	<i>Cacna1c</i>	NM_009781
<i>CACNA1D</i>	NM_000720	<i>Cacna1d</i>	NM_017298	<i>Cacna1d</i>	NM_028981
<i>CACNA1F</i>	NM_005183	<i>Cacna1f</i>	NM_053701	<i>Cacna1f</i>	NM_019582
<i>CACNA1A</i>	NM_023035	<i>Cacna1a</i>	NM_012918	<i>Cacna1a</i>	NM_007578
<i>CACNA1B</i>	NM_000718	<i>Cacna1b</i>	NM_147141	<i>Cacna1b</i>	NM_001042528
<i>CACNA1E</i>	NM_000721	<i>Cacna1e</i>	NM_019294	<i>Cacna1e</i>	NM_009782
<i>CACNA1G</i>	NM_198387	<i>Cacna1g</i>	NM_031601	<i>Cacna1g</i>	NM_009783
<i>CACNA1H</i>	NM_021098	<i>Cacna1h</i>	NM_153814	<i>Cacna1h</i>	NM_021415
<i>CACNA1I</i>	NM_001003406	<i>Cacna1i</i>	NM_020084	<i>Cacna1i</i>	NM_001044308
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<i>KCNA5</i>	NM_002234	<i>Kcna5</i>	NM_012972	<i>Kcna5</i>	NM_145983
<i>KCNA6</i>	NM_002235	<i>Kcna6</i>	NM_023954	<i>Kcna6</i>	NM_013568
<i>KCNA7</i>	NM_031886	<i>Kcna7</i>	NM_001108914	<i>Kcna7</i>	NM_010596
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<i>KCNC1</i>	NM_004976	<i>Kcnc1</i>	NM_012856	<i>Kcnc1</i>	NM_008421
<i>KCNC2</i>	NM_153748	<i>Kcnc2</i>	NM_139217	<i>Kcnc2</i>	NM_001025581
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<i>KCNG3</i>	NM_133329	<i>Kcng3</i>	NM_001033957	<i>Kcng3</i>	NM_153512
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<i>KCNQ2</i>	NM_172107	<i>Kcnq2</i>	NM_133322	<i>Kcnq2</i>	NM_010611
<i>KCNQ3</i>	NM_004519	<i>Kcnq3</i>	NM_031597	<i>Kcnq3</i>	NM_152923
<i>KCNQ4</i>	NM_004700	<i>Kcnq4</i>	XM_233477	<i>Kcnq4</i>	NM_001081142
<i>KCNQ5</i>	NM_019842	<i>Kcnq5l</i>	XM_001071249	<i>Kcnq5</i>	NM_023872
<i>KCNV1</i>	NM_014379	<i>Kcnv1</i>	NM_021697	<i>Kcnv1</i>	NM_026200
<i>KCNV2</i>	NM_133497	<i>Kcnv2</i>	NM_001106370	<i>Kcnv2</i>	NM_183179
<i>KCNS1</i>	NM_002251	<i>Kcns1</i>	NM_053954	<i>Kcns1</i>	NM_008435
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<i>KCNH6</i>	NM_173092	<i>Kcnh6</i>	NM_053937	<i>Kcnh6</i>	NM_001037712
<i>KCNH7</i>	NM_173162	<i>Kcnh7</i>	NM_131912	<i>Kcnh7</i>	NM_133207
<i>KCNH8</i>	NM_144633	<i>Kcnh8</i>	NM_145095	<i>Kcnh8</i>	NM_001031811
<i>KCNH3</i>	NM_012284	<i>Kcnh3</i>	NM_017108	<i>Kcnh3</i>	NM_010601
<i>KCNH4</i>	NM_012285	<i>Kcnh4</i>	NM_053630	<i>Kcnh4</i>	NM_001081194
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<i>SCN2A</i>	NM_001040142	<i>Scn2a1</i>	NM_012647	<i>Scn2a1</i>	NM_001099298
<i>SCN3A</i>	NM_006922	<i>Scn3a</i>	NM_013119	<i>Scn3a</i>	NM_018732
<i>SCN4A</i>	NM_000334	<i>Scn4a</i>	NM_013178	<i>Scn4a</i>	NM_133199
<i>SCN5A</i>	NM_001099404	<i>Scn5a</i>	NM_013125	<i>Scn5a</i>	NM_021544
<i>SCN8A</i>	NM_014191	<i>Scn8a</i>	NM_019266	<i>Scn8a</i>	NM_001077499
<i>SCN9A</i>	NM_002977	<i>Scn9a</i>	NM_133289	<i>Scn9a</i>	NM_018852
<i>SCN10A</i>	NM_006514	<i>Scn10a</i>	NM_017247	<i>Scn10a</i>	NM_009134
<i>SCN11A</i>	NM_014139	<i>Scn11a</i>	NM_019265	<i>Scn11a</i>	NM_011887
