

**Table S1. SNPs in InnateDB genes that significantly correlate with virus diversity.**

SNP	Gene	Annotation <sup>a</sup>	$\tau$	<i>p</i> value
rs993715	<i>CNTNAP2</i>	intron	0.6085	0.00015260
rs2189883	<i>CNTNAP2</i>	intron	0.6081	0.00014171
rs3785415	<i>CDH15</i>	intron	0.6032	0.00016120
rs4575989	<i>C1QTNF7</i>	intron	0.5965	0.00022806
rs7637370	<i>CLDN18</i>	intron	0.5960	0.00023918
rs4629443	<i>C1QTNF7</i>	intron	0.5955	0.00023966
rs7927476	<i>NELL1</i>	intron	0.5934	0.00028950
rs1065154	<i>SQSTM1</i>	3' UTR	0.5893	0.00040041
rs12145973	<i>IL19</i>	intron	0.5890	0.00310987
rs4953260	<i>PRKCE</i>	intron	0.5872	0.00043864
rs4077341	<i>TNFRSF10C</i>	intron	0.5869	0.00044225
rs2793434	<i>GPLD1</i>	intron	0.5866	0.00040744
rs6599300	<i>MAEA</i>	intron	0.5843	0.00051153
rs13340461	<i>CCND3</i>	intron	0.5840	0.00062923
rs10849446	<i>SCNN1A</i>	intron	0.5831	0.00055910
rs12186418	<i>PDZD2</i>	intron	0.5831	0.00049477
rs4698103	<i>C1QTNF7</i>	intron	0.5825	0.00051729
rs17282579	<i>CLDN18</i>	intron	0.5806	0.00072735
rs2600306	<i>CNTN4</i>	intron	0.5800	0.00065050
rs700550	<i>LRP2</i>	intron	0.5777	0.00074769
rs971403	<i>LAMA4</i>	intron	0.5776	0.00087172
rs2659501	<i>PPP3CA</i>	intron	0.5771	0.00075242
rs2016977	<i>ST8SIA1</i>	intron	0.5738	0.00281559
rs3782525	<i>ST8SIA1</i>	intron	0.5738	0.00281559
rs4130023	<i>CCND3</i>	intron, phastCons element	0.5725	0.00120410
rs1346690	<i>NELL1</i>	intron	0.5724	0.00099399
rs2527049	<i>CNTNAP2</i>	intron	0.5719	0.00138919
rs5917027	<i>CLDN2</i>	intron	0.5718	0.00194824
rs1874108	<i>FREM1</i>	intron, phastCons element	0.5711	0.00117500
rs1055636	<i>SLFN5</i>	3' UTR	0.5705	0.00177587
rs2714174	<i>LRP1B</i>	intron	0.5702	0.00118573
rs1402470	<i>LRP1B</i>	intron	0.5685	0.00140795
rs1922889	<i>CNTNAP2</i>	intron	0.5682	0.00156774
rs11242715	<i>GMDS</i>	intron	0.5661	0.00167284
rs7712010	<i>PDZD2</i>	intron	0.5659	0.00150229

rs17656058	<i>CLEC4F</i>	intron, phastCons element	0.5655	0.00279468
rs708228	<i>CTNND1</i>	3' UTR, phastCons element	0.5647	0.00210315
rs13182372	<i>PDZD2</i>	intron	0.5646	0.00171276
rs4698374	<i>C1QTNF7</i>	intron	0.5642	0.00151817
rs2683824	<i>LRP1B</i>	intron	0.5629	0.00179731
rs2501254	<i>HSPG2</i>	intron	0.5595	0.00191694
rs12568035	<i>LAMB3</i>	intron	0.5575	0.00322326
rs2275254	<i>CHIA</i>	F354S	0.5571	0.00220021
rs3856982	<i>MAEA</i>	intron	0.5565	0.00249450
rs2850350	<i>PPP3CA</i>	intron	0.5564	0.00220599
rs1848116	<i>PPP3CA</i>	intron	0.5563	0.00239862
rs7736502	<i>PDZD2</i>	intron	0.5559	0.00260144
rs7107376	<i>FCHSD2</i>	intron	0.5558	0.00339272
rs2707575	<i>CNTNAP2</i>	intron	0.5550	0.00312479
rs1061631	<i>TNFRSF1B</i>	3' UTR	0.5547	0.00465174
rs2850976	<i>PPP3CA</i>	intron	0.5544	0.00242220
rs1138803	<i>GMDS</i>	intron	0.5540	0.00263712
rs953035	<i>PSMB2</i>	intron	0.5532	0.00286997
rs980618	<i>IL16</i>	intron	0.5524	0.00300278
rs2541886	<i>UNG</i>	intron	0.5519	0.00339001
rs12879377	<i>GALNTL1</i>	M201V	0.5512	0.00488440
rs10857274	<i>DCHS2</i>	intron	0.5506	0.00328931
rs4386	<i>TOM1</i>	intron	0.5506	0.00328721
rs7695691	<i>MAEA</i>	intron	0.5496	0.00357637
rs565280	<i>SQSTM1</i>	intron	0.5490	0.00374946
rs2275603	<i>FCRLA</i>	S203G	0.5484	0.00388369
rs372454	<i>MMD2</i>	3' UTR	0.5477	0.00392815
rs11771941	<i>CNTNAP2</i>	intron	0.5477	0.00487690
rs7121400	<i>NELL1</i>	intron	0.5473	0.00410900
rs4782496	<i>CBFA2T3</i>	intron	0.5462	0.00483234
rs10502966	<i>DCC</i>	intron	0.5453	0.00854755
rs11160322	<i>BDKRB2</i>	intron	0.5451	0.00487070
rs6706275	<i>HDAC4</i>	intron	0.5435	0.00718766
rs9985234	<i>LPP</i>	intron	0.5423	0.00981179
rs2037407	<i>LIN7A</i>	intron	0.5423	0.00576535
rs6942912	<i>CNTNAP2</i>	intron	0.5421	0.00596000
rs2708285	<i>CNTNAP2</i>	intron	0.5420	0.00596000

rs2205084	<i>DSCAM</i>	intron	0.5412	0.00605740
rs1333399	<i>TOM1</i>	intron	0.5410	0.00605864
rs10178342	<i>LRP1B</i>	intron	0.5410	0.00539363
rs1351026	<i>PPFIBP1</i>	intron	0.5410	0.00539697
rs13329773	<i>CBFA2T3</i>	intron	0.5407	0.00677315
rs11049057	<i>PPFIBP1</i>	intron	0.5406	0.00607606
rs4411113	<i>DDR2</i>	intron	0.5404	0.00608105
rs2583401	<i>PPP3CA</i>	intron	0.5402	0.00542488
rs822577	<i>ARHGEF11</i>	intron	0.5396	0.00589956
rs10911812	<i>HMCN1</i>	intron	0.5396	0.00589231
rs3824988	<i>SERPING1</i>	intron	0.5396	0.00894839
rs7954545	<i>PKP2</i>	intron	0.5390	0.00638318
rs3217881	<i>CCND2</i>	intron	0.5386	0.00689978
rs139149	<i>PARVG</i>	intron	0.5382	0.00642763
rs2796813	<i>TGFB2</i>	intron	0.5380	0.00722204
rs448849	<i>CLDN14</i>	intron	0.5376	0.00698720
rs531071	<i>NEGR1</i>	intron, phastCons element	0.5374	0.00751769
rs4651292	<i>HMCN1</i>	intron	0.5365	0.00758328
rs183156	<i>PDZD2</i>	intron	0.5361	0.00732365
rs419941	<i>CLDN14</i>	intron	0.5361	0.00732365
rs870144	<i>ADARB1</i>	intron	0.5361	0.00732365
rs8106303	<i>FXYD5</i>	intron	0.5349	0.00920391
rs2526121	<i>SEMA5A</i>	intron	0.5345	0.00769579
rs878949	<i>HSPG2</i>	intron	0.5343	0.00768806
rs10842938	<i>PPFIBP1</i>	intron	0.5341	0.00770357
rs3128575	<i>COL5A1</i>	3' UTR, phastCons element	0.5335	0.00862800
rs8023564	<i>AQP9</i>	intron	0.5333	0.00972604
rs11049046	<i>PPFIBP1</i>	intron	0.5325	0.00840894
rs2289239	<i>POLR1A</i>	intron	0.5325	0.00975703
rs3773768	<i>CLDN18</i>	intron	0.5325	0.00944358
rs1203148	<i>KIAA0319L</i>	intron	0.5302	0.00957781
rs12920161	<i>CDH13</i>	intron	0.5298	0.00998214

\*The aminoacid substitution is reported for nonsynonymous SNPs; SNPs annotated as "phastCons element" are located within non-coding genomic regions that display high sequence conservation among mammals (as described in the text).