

Number of amino acid variations and similarities of S protein compared with other groups of SARS-CoV										
Sequence	compared with total S protein SARS-CoV-2			compared with RBD domain SARS-CoV-2			compared with S2 glycoprotein domain SARS-CoV-2			
	Number of aa similarities	Number of aa Variations	Number of gap	Number of aa similarities ²	Number of aa Variations ³	Total Number of gap ²	Number of aa similarities ⁵	Number of aa Variations ⁶	Total Number of gap ³	
QHD43416.1/SARS-CoV-2	1273	0	5	223	0	0	609	0	0	0
QHR63300.2/Bat-SARS-CoV-RaTG13	1240	33	5	201	22	0	603	6	4	4
QIA48623.1/Pangolin-CoV	1174	99	9	192	31	2	590	19	4	4
AVP78031.1/Bat-SARS-CoV	1023	250	13	149	74	19	566	43	4	4
AVP78042.1/Bat-SARS-CoV	1015	258	32	149	74	19	566	43	4	4
AAP13441.1/SARS-CoV-Urbani	966	307	33	163	60	1	541	68	4	4
AAP41037.1/SARS-CoV	965	308	23	163	60	1	541	68	4	4

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	Percentage of similarities	percentage of variation	Percentage of gap	Percentage of similarities ²	percentage of variation ³	Percentage of gap ⁴	Percentage of similarities ⁵	Percentage of variation ⁶	Percentage of gap ⁷	
QHD43416.1/SARS-CoV-2	100.00	0.00	0.39	100.00	0.00	0.00	100.00	0.00	0.00	0.00
QHR63300.2/Bat-SARS-CoV-RaTG13	97.41	2.59	0.39	90.13	9.87	0.00	99.01	0.99	0.66	0.66
QIA48623.1/Pangolin-CoV	92.22	7.78	0.71	86.10	13.90	0.90	96.88	3.12	0.66	0.66
AVP78031.1/Bat-SARS-CoV	80.36	19.64	1.02	66.82	33.18	8.52	92.94	7.06	0.66	0.66
AVP78042.1/Bat-SARS-CoV	79.73	20.27	2.51	66.82	33.18	8.52	92.94	7.06	0.66	0.66
AAP13441.1/SARS-CoV-Urbani	75.88	24.12	2.59	73.09	26.91	0.45	88.83	11.17	0.66	0.66
AAP41037.1/SARS-CoV	75.81	24.19	1.81	73.09	26.91	0.45	88.83	11.17	0.66	0.66