

Table 7. Non-synonymous substitutions in S gene of bat-SARS-CoV and SARS-CoV.†

21549	C	G G G G G G G G G G	
21550	A	C C C C C C C C C C	
21551	A	T T T T T T T T T T	
21557	A	T T T T T T T T T T	
21558	A	T T T T T T T T T T	
21559	T	A A A A A A A A A A	
21560	G	C C C C C C C C C C	
21561	G	A A A A A A A A A A	
21563	A	T T T T T T T T T T	
21567	G	T C C C C C C C C C C	
21568	T	A A A A A A A A A A	
21569	C	T T T T T T T T T T	
21570	T	A A A A A A A A A A	
21572	A	T T T T T T T T T T	
21579	C	A A A A A A A A A A	
21580	G	T T T T T T T T T T	
21581	T	G G G G G G G G G G	
21597	A	C C C C C C C C C C	
21598	A	C C C C C C C C C C	
21605	C	A A A A A A A A A A	
21621	G	A A A A A A A A A A	
21622	T	C C C C C C C C C C	
21623	G	T T T T T T T T T T	
21627	C	T T T T T T T T T T	
21629	C	T T T T T T T T T T	
21643	A	T T T T T T T T T T	
21644	C	A A A A A A A A A A	
21657	G	T T T T T T T T T T	
21659	C	T T T T T T T T T T	
21663	A	G	G G G G G G G G G G
21666	T	T T T T T T T T T T	
21668	A	G G G G G G G G G G	
21672	C	G G G G G G G G G G	
21673	A	G G G G G G G G G G	
21676	A	T T T T T T T T T T	
21677	C	T T T T T T T T T T	
21678	T	C C C C C C C C C C	
21679	T	A A A A A A A A A A	
21681	T	A A A A A A A A A A	
21683	G	T T T T T T T T T T	
21684	C	A A A A A A A A A A	
21690	G	C C C C C C C C C C	
21691	T	A A A A A A A A A A	
21692	G	T T T T T T T T T T	
21693	G	A A A A A A A A A A	
21694	A	C C C C C C C C C C	
21695	T	G G G G G G G G G G	
21718	A	G G G G G	
21726	A	G G G G G G G G G G	
21728	A	C C C C C C C C C C	
21729	C	A A A A A A A A A A	
21732	G	C C C C C C C C C C	
21733	A	C C C C C C C C C C	
21734	C	T T T T T T T T T T	
21738	G	A A A A A A A A A A	

21739	G	A A A A A A A A A A A A
21740	T	G G G G G G G G G G G G
21747	G	A A A A A A A A A A A A
21780	A	G G G G G G G G G G G G
21782	A	C C C C C C C C C C C C
21792	A	G G G G G G G G G G G G
21804	T	A A A A A A A A A A A A
21806	T	C C C C C C C C C C C C
21807	T	A A A A A A A A A A A A
21809	T	G G G G G G G G G G G G
21810	G	A A A A A A A A A A A A
21812	T	C C C C C C C C C C C C
21817	C	A A A A A A A A A A A A
21818	C	G G G G G G G G G G G G
21819	A	T T T T T T T T T T T T
21821	C	A A A A A A A A A A A A
21829	C	T T T T T T T T T T T T
21830	T	G G G G G G G G G G G G
21831	G	A A A A A A A A A A A A
21837	G	A A A A A A A A A A A A
21852	C	A A A A A A A A A A A A
21854	C	T T T T T T T T T T T T
21855	A	G G G G G G G G G G G G
21858	A	G G G G G G G G G G G G
21868	T	C C C C C C C C C C C C
21869	G	A A A A A A A A A A A A
21879	A	G G G G G G G G G G G G
21881	C	A A A A A A A A A A A A
21888	A	G G G G G G G G G G G G
21890	A	C C C C C C C C C C C C
21891	G	A A A A A A A A A A A A
21893	A	C C C C C C C C C C C C
21897	A	T T T T T T T T T T T T
21899	G	C C C C C C C C C C C C
21901	A	T T T T T T T T T T T T
21903	A	G G G G G G G G G G G G
21904	C	T T T
21913	G	A A A A A A A A A A A A
21922	A	G G
21924	C	A A A A A A A A A A A A
21925	A	C C C C C C C C C C C C
21927	A	C C C C C C C C C C C C
21930	G	A A A A A A A A A A A A
21932	C	T T T T T T T T T T T T
21933	T	A A A A A A A A A A A A
21934	G	T T T T T T T T T T T T
21936	G	A A A A A A A A A A A A
21938	T	A A A A A A A A A A A A
21940	A	T T T T T T T T T T T T
21941	T	C C C C C C C C C C C C
21942	C	G G G G G G G G G G G G
21944	G	T T T T T T T T T T T T
21946	G	A A A A A A A A A A A A
21964	A	T T T T T T T T T T T T
21965	T	C C C C C C C C C C C C

21968	C	G G G G G G G G G G
21969	C	T T T T T T T T T T
21970	G	A A A A A A A A A A
21971	A	C C C C C C C C C C
21972	G	A A A A A A A A A A
21974	G	A A A A A A A A A A
21975	G	T T T T T T T T T T
21976	A	C C C C C C C C C C
21977	A	T T T T T T T T T T
21978	A	G G G G G G G G G G
21980	G	T T T T T T T T T T
21981	A	G G G G G G G G G G
21982	G	C C C C C C C C C C
21983	T	C C C C C C C C C C
21987	C	T T T T T T T T T T
21988	A	C C C C C C C C C C
21989	A	G G G G G G G G G G
21996	A	G G G G G G G G G G
21997	C	T T T T T T T T T T
21999	A	T T T T T T T T T T
22001	T	A A A A A A A A A A
22002	C	G G G G G G G G G G
22003	C	A A A A A A A A A A
22004	T	A A A A A A A A A A
22008	A	T T T T T T T T T T
22010	T	A A A A A A A A A A
22023	G	C C C C C C C C C C
22036	A	T T T T T T T T T T
22051	G	A A A A A A A A A A
22052	G	A A A A A A A A A A
22066	C	A A A A A A A A A A
22074	C	A A A A A A A A A A
22076	A	G G G G G G G G G G
22077	A	G G G G G G G G G G
22078	C	G G G G G G G G G G
22079	T	C C C C C C C C C C
22083	A	C C C C C C C C C C
22084	C	A A A A A A A A A A
22085	T	A A A A A A A A A A
22086	G	C C C C C C C C C C
22089	G	A A A A A A A A A A
22091	T	A A A A A A A A A A
22092	A	G G G G G G G G G G
22095	T	G G G G G G G G G G
22098	C	G G G G G G G G G G
22099	C	T T T T T T T T T T
22100	C	T T T T T T T T T T
22105	G	A A A A A A A A A A
22106	A	T T T T T T T T T T
22113	A	T T T T T T T T T T
22115	G	T T T T T T T T T T
22122	T	A A A A A A A A A A
22123	C	A A A A A A A A A A
22124	A	C C C C C C C C C C
22125	G	A A A A A A A A A A

22126	T	C C C C C C C C C C
22127	C	T T T T T T T T T T
22142	A	T T T T T T T T T T
22152	T	C C C C C C C C C C
22163	T	G A A
22170	T	A A A A A A A A A A
22171	C	A A A A A A A A A A
22174	A	T T T T T T T T T T
22180	T	C C C C C C C C C C
22181	A	C C C C C C C C C C
22182	G	A A A A A A A A A A
22185	A	C C C C C C C C C C
22187	G	T T T T T T T T T T
22188	G	A A A A A A A A A A
22191	A	G G G G G G G G G G
22192	T	C C C C C C C C C C
22193	G	C C C C C C C C C C
22197	A	T T
22198	G	T T
22199	C	A A
22201	A	C C C C C C C C C C
22202	A	T T T T T T T T T T
22203	A	G G G G G G G G G G
22206	A	C C C C C C C C C C
22207	C	A A A A A A A A A A
22208	T	A A A A A A A A A A
22209	T	G G G G G G G G G G
22210	C	A A A A A A G A A A
22211	T	C C C C C C C C C C
22213	A	T T T T T C C C C C
22216	T	G G G G G G G G G G
22217	T	G G G G G G G G G G
22218	T	G G G G G G G G G G
22219	T	G G G G G G G G G G
22220	A	C C C C C C C C C C
22221	C	A A A A A A A A A A
22223	A	G G G G G G G G G G
22224	G	T T T T T T T T T T
22225	A	C C C C C C C C C C
22227	A	G G G G G G G G G G
22228	G	C C C C C C C C C C
22240	A	T T T T T T T T T T
22248	A	T T T T T T T T T T
22257	T	C C C C C C C C C C
22258	A	C C C C C C C C C C
22259	T	A A A A A A A A A A
22260	T	A A A A A A A A A A
22264	C	A A
22265	C	A A
22275	C	A A A A A A A A A A
22276	G	A A A A A A A A A A
22277	A	G G G G G G G G G G
22279	T	A A A A A A A A A A
22281	A	G G G G G G G G G G
22347	A	T T T T T T T T T T

22349	C	T T T T T T T T T T T
22350	A	G G G G G G G G G G G
22357	A	G G G G G G G G G G G
22358	T	C C C C C C C C C C C
22362	A	G G G G G G G G G G G
22364	T	G G G G G G G G G G G
22365	G	A A A A A A A A A A A
22404	T	G G G G G G G G G G G
22405	C	T T T T T T T T T T T
22406	A	T T T T T T T T T T T
22410	A	T T T T T T T T T T T
22412	T	A A A A A A A A A A A
22413	C	G G G G G G G G G G G
22414	A	G G G G G G G G G G G
22418	G	T T T T T T C T T T T
22422	A	G G G G G G G G G G G
22424	T	G G G G G G G G G G G
22446	C	T T T T T T T T T T T
22447	G	T T T T T T T T T T T
22448	C	G G G G G G G G G G G
22459	A	G G G G G G G G G G G
22460	C	A A A A A A A A A A A
22461	A	G G G G G G G G G G G
22479	C	A A A A A A A A A A A
22480	G	A A A A A A A A A A A
22481	C	A A A A A A A A A A A
22488	A	T T T T T T C T T T T
22489	A	C C C C C C C C C C C
22510	C	A A A A A A A A A A A
22513	A	G G G G G
22521	G	A A A A A A A A A A A
22539	A	T T T T T T T T T T T
22561	C	T T T T T
22593	C	G G G G G G G G G G G
22595	A	C C C C C C C C C C C
22596	T	A A A A A A A A A A A
22606	T	A A A A A A A A A A A
22620	A	T T T T T T T T T T T
22622	A	C C C C C C C C C C C
22624	G	A A A A A A A A A A A
22638	A	T T T T T T T T T T T
22640	A	T T T T T T T T T T T
22644	T	G G G G G G G G G G G
22646	G	A A A A A A A A A A A
22647	A	G G G G G G G G G G G
22649	A	C C C C C C C C C C C
22651	G	A A A A A A A A A A A
22652	A	G G G G G G G G G G G
22653	T	G G G G G G G G G G G
22654	C	G G G G G G G G G G G
22655	T	A A A A A A A A A A A
22656	T	G G G G G G G G G G G
22657	C	A A A A A A A A A A A
22661	A	T T T T T T T T T T T
22671	G	A A A A A A A A A A A

22673	T	A A A A A A A A A A A A
22683	G	C C C C C C C C C C C C
22732	C	T T T T T T T T T T T T
22733	T	G G G G G G G G G G G G
22743	A	C C C C C C C C C C C C
22758	G	A A A A A A A A A A A A
22759	C	G G G G G G G G G G G G
22760	T	G G G G G G G G G G G G
22763	A	C C C C C C C C C C C C
22764	C	A A A A A A A A A A A A
22765	A	T T T T T T T T T T T T
22782	T	A A A A A A A A A A A A
22784	C	A A A A A A A A A A A A
22792	C	A A A A A A A A A A A A
22795	A	T T T T T T T T T T T T
22800	A	C C C C C C C C C C C C
22802	G	T T T T T T T T T T T T
22803	A	G G G G G G G G G G G G
22804	C	G G G G G G G G G G G G
22805	T	C C C C C C C C C C C C
22813	A	G G G G G G G G G G G G
22830	C	A A A A A A A A A A A A
22832	G	A A A A A A A A A A A A
22839	G	C C C C C C C C T C C C
22840	A	C C C C C C C C C C C C
22841	C	T T T T T T T T T T T T
22851	G	T T T T T T T T T T T T
22854	G	T T T T T T T T T T T T
22855	T	A A A A A A A A A A A A
22856	G	T T T T T T T T T T T T
22858	A	G G G G G G G G G G G G
22859	T	G G G G G G G G G G G G
22860	A	C C C C C C C C C C C C
22866	T	A A A A A A A A A A A A
22867	C	A A A A A A G G G G A A
22868	A	T T T T T T
22869	A	G G G G G G G G G G G G
22870	C	A A A A A G G G G A A
22871	A	T T T T T T T T T T T T
22876	A	G G G G G G G G G G G G
22877	C	T T T T T T T T T T T T
22881	A	T T T T T T T T T T T T
22884	C	A A A A A A A A A A A A
22886	T	C C C C C C C C C C C C
22888	A	C C C C C C C C C C C C
22889	C	T T T T T T T T T T T T
22890	G	A A A A A A A A A A A A
22891	T	C C C C C G G G G G G
22893	C	G G G G G G G G G G G G
22894	C	G G G G G G G G G G G G
22895	A	C C C C C C C C C C C C
22896	G	A A A A A A A A A A A A
22898	A	T T T T T T T T T T T T
22900	C	G G G G G G G G G G G G
22901	A	C C C C C C C C C C C C

22908	G	C C C C C C C C C C
22911	A	T T T T T T T T T T
22912	C	A A A A A A A A A A
22913	T	C C C C C C C C C C
22985	A	C C C C C C C C C C
22989	G	A A A A A A A A A A
23029	A	C C C C C C C C C C
23030	A	T T T T T T T T T T
23049	T	C C C C C C C C C C
23070	T	C C C C C C C C C C
23094	A	G G G G G G G G G G
23095	C	T T T T T T T T T T
23096	A	T T T T T T T T T T
23103	T	A
23105	T	C
23127	C	A A A A A A A A A A
23129	G	A A A A A A A A A A
23134	T	C C C C C C C C C C
23135	A	T T T T T T T T T T
23160	T	G
23162	C	T
23250	C	T T T T T T T T T T
23256	G	T T T
23257	C	T T T
23263	G	A A A A A A A A A A
23270	T	A A A
23292	G	A A A A A A A A A A
23294	T	A A A A A A A A A A
23307	G	A A A A A A A A A A
23308	T	A A A A A A A A A A
23309	A	C C C C C C C C C C
23358	A	G G G G G G G G G G
23361	G	A A A A A A A A A A
23363	C	T T T T T T T T T T
23385	A	G
23419	C	T T T T T T T T T T
23422	C	T
23424	G	T T T T T T T T T T
23425	T	C C C C C C
23426	T	A A A A A A A A A A
23439	G	A A A A A A A A A A
23483	A	T T T T T T T T T T
23485	A	G G G G G G G G G G
23499	G	T T T T T T T T T T
23508	T	A A A A A A A A A A
23510	A	C C C C C C C C C C
23533	C	T T
23541	G	A A A A A A A A A A
23543	C	T T T T T T T T T T
23580	G	T T T T T T T T T T
23593	C	A A A A A A A A A A
23616	T	A A A A A A A A A A
23617	T	C C C C C C C C C C
23618	A	T T T T T T T T T T
23625	A	G G G G G G G G G G

23626	G	C C C C C C C C C C C
23627	C	T T T T T T T T T T T
23658	A	G G
23659	C	G G G
23679	A	T T T T T T T T T T T
23681	T	A A A A A A A A A A A
23691	A	G G G G G G G G G G G
23692	T	C C C C C C C C C C
23693	A	T T T T T T T T T T T
23703	A	C C C C C C C C C C C
23704	A	G G G G G G G G G G G
23705	A	C C C C C C C C C C C
23713	A	G G G G G G G G G G G
23714	G	T T T T T T T T T T T
23725	C	T T T
23726	C	T T T
23754	G	A A A A A A A A A A A
23756	C	T T T T T T T T T T T
23757	A	T T T T T T T T T T T
23759	A	G G G G G G G G G G G
23763	G	T T T T T
23765	C	T T T T T
23805	T	C C C C C C C C C C C
23806	C	T T T T T T T T T T T
23894	C	A A A A A A A A A A A
23907	G	A A A A A A A A A A A
23911	G	A A A A A A A A A A A
23981	G	T T T T T T T T T T T
23985	G	A A A A A A A A A A A
24111	A	G G
24113	T	C C
24142	T	A A A A A A A A A A A
24143	G	A A A A A A A A A A A
24163	G	A A A A A A A A A A A
24164	T	G G G G G G G G G G G
24171	G	A A A A A A A A A A A
24173	C	T T T T T T T T T T T
24174	A	C C C C C C C C C C C
24192	T	A A A A A A A A A A A
24195	T	A A A A A A A A A A A
24197	T	A A A A A A A A A A A
24201	G	T T T T T T T T T T T
24205	G	C C C C C C C C C C C
24540	T	G G G G G G G G G G G
24595	A	G G G G G G G G G G G
24596	A	G G G G G G G G G G G
24667	C	T T T T T T T T T T T
24670	A	G
24706	A	T T T T T T T T T T T
24707	C	T T T T T T T T T T T
24717	T	A A A A A A A A A A A
24873	C	T
24918	A	G G G G G
24920	G	A A A A A

[†] The nucleotide positions are based on bat SARS-CoV B24 (GenBank accession no. DQ022305). Blank indicates nucleotides identical to those of B24.