Table S1. List of accessions used in multiple alignments.

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| MT135043.1 | EU371559.1 | DQ415912.1 |
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| MT385496.1 |  |  |
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| MT385494.1 |  |  |

Figure S1. Simple Neighbor-joining tree for nine different complete coronavirus genomes. Note that this tree is only for illustrative purposes.

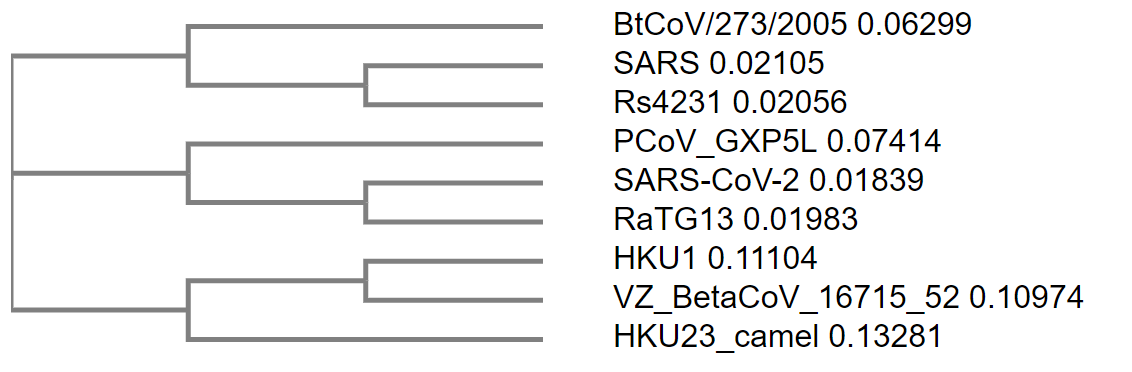


Table S2. Coordinates of SARS-CoV-2 G to U transversions. The coordinates and gene annotations are based on SARS-CoV-2 Reference Sequences: NC\_045512.2. First nucleotide has coordinate 1.

|  |  |  |
| --- | --- | --- |
| Coodinate | Type | Nucleotide/Codon change |
| 53 | Nongene | G to U |
| 88 | Nongene | G to U |
| 90 | Nongene | G to U |
| 101 | Nongene | G to U |
| 198 | Nongene | G to U |
| 199 | Nongene | G to U |
| 208 | Nongene | G to U |
| 219 | Nongene | G to U |
| 261 | Nongene | G to U |
| 332 | Nonsynonymous | GUU to UUU |
| 598 | Synonymous | GUG to GUU |
| 625 | Nonsynonymous | AAG to AAU |
| 1148 | Nonsynonymous | GGC to UGC |
| 1580 | Nonsynonymous | GUU to UUU |
| 1895 | Nonsynonymous | GUA to UUA |
| 2632 | Nonsynonymous | AUG to AUU |
| 2764 | Synonymous | GUG to GUU |
| 2782 | Synonymous | GUG to GUU |
| 2951 | Nonsynonymous | GAU to UAU |
| 2957 | Nonsynonymous | GAU to UAU |
| 3231 | Nonsynonymous | GGU to GUU |
| 3251 | Nonsynonymous | GAC to UAC |
| 3259 | Nonsynonymous | CAG to CAU |
| 3286 | Nonsynonymous | GAG to GAU |
| 3871 | Nonsynonymous | AAG to AAU |
| 3947 | Nonsynonymous | GAU to UAU |
| 3955 | Nonsynonymous | AAG to AAU |
| 4148 | Nonsynonymous | GUU to UUU |
| 4201 | Nonsynonymous | AUG to AUU |
| 4255 | Synonymous | CCG to CCU |
| 4288 | Nonsynonymous | GAG to GAU |
| 4975 | Synonymous | GUG to GUU |
| 5062 | Nonsynonymous | UUG to UUU |
| 5572 | Nonsynonymous | AUG to AUU |
| 5716 | Nonsynonymous | AAG to AAU |
| 6819 | Nonsynonymous | AGU to AUU |
| 7675 | Synonymous | GCG to GCU |
| 7936 | Synonymous | GCG to GCU |
| 8102 | Nonsynonymous | GUU to UUU |
| 9049 | Nonsynonymous | AAG to AAU |
| 9479 | Nonsynonymous | GGU to UGU |
| 9705 | Nonsynonymous | UGU to UUU |
| 10846 | Nonsynonymous | AUG to AUU |
| 11042 | Nonsynonymous | GUU to UUU |
| 11083 | Nonsynonymous | UUG to UUU |
| 11417 | Nonsynonymous | GUU to UUU |
| 12208 | Nonsynonymous | AAG to AAU |
| 12464 | Nonsynonymous | GCA to UCA |
| 12467 | Nonsynonymous | GCC to UCC |
| 12491 | Nonsynonymous | GAC to UAC |
| 12572 | Nonsynonymous | GAU to UAU |
| 12578 | Nonsynonymous | GAU to UAU |
| 12582 | Nonsynonymous | AGU to AUU |
| 12773 | Nonsynonymous | GCU to UCU |
| 12793 | Nonsynonymous | AAG to AAU |
| 13513 | Nonsynonymous | CAG to CAU |
| 13571 | Nonsynonymous | GUU to UUU |
| 13771 | Nonsynonymous | UGG to UGU |
| 14044 | Nonsynonymous | UUG to UUU |
| 14118 | Nonsynonymous | CGC to CUC |
| 14229 | Nonsynonymous | AGC to AUC |
| 14718 | Nonsynonymous | AGG to AUG |
| 15193 | Nonsynonymous | GAG to GAU |
| 15418 | Synonymous | GUG to GUU |
| 15672 | Nonsynonymous | AGU to AUU |
| 15906 | Nonsynonymous | AGG to AUG |
| 16075 | Synonymous | CUG to CUU |
| 16377 | Nonsynonymous | CGU to CUU |
| 16396 | Nonsynonymous | CAG to CAU |
| 16858 | Nonsynonymous | AUG to AUU |
| 16897 | Nonsynonymous | AUG to AUU |
| 16912 | Nonsynonymous | UUG to UUU |
| 16957 | Nonsynonymous | UAG to UAU |
| 17278 | Nonsynonymous | AAG to AAU |
| 17302 | Nonsynonymous | AUG to AUU |
| 17338 | Nonsynonymous | CAG to CAU |
| 17427 | Nonsynonymous | UGU to UUU |
| 17679 | Nonsynonymous | CGC to CUC |
| 17808 | Nonsynonymous | AGA to AUA |
| 18149 | Nonsynonymous | GUU to UUU |
| 18281 | Nonsynonymous | GAC to UAC |
| 18325 | Nonsynonymous | AUG to AUU |
| 18756 | Nonsynonymous | CGU to CUU |
| 18762 | Nonsynonymous | UGA to UUA |
| 18898 | Nonsynonymous | UUG to UUU |
| 18973 | Nonsynonymous | AGG to AGU |
| 18984 | Nonsynonymous | UGG to UUG |
| 19542 | Nonsynonymous | UGA to UUA |
| 19645 | Nonsynonymous | AUG to AUU |
| 19656 | Nonsynonymous | AGG to AUG |
| 19684 | Nonsynonymous | AAG to AAU |
| 19999 | Nonsynonymous | GAG to GAU |
| 20002 | Nonsynonymous | UUG to UUU |
| 20134 | Synonymous | CCG to CCU |
| 20476 | Nonsynonymous | CAG to CAU |
| 20580 | Nonsynonymous | UGA to UUA |
| 21151 | Nonsynonymous | GAG to GAU |
| 21204 | Nonsynonymous | AGC to AUC |
| 21225 | Nonsynonymous | GGU to GUU |
| 21452 | Nonsynonymous | GUC to UUC |
| 21800 | Nonsynonymous | GAU to UAU |
| 21830 | Nonsynonymous | GUU to UUU |
| 21850 | Nonsynonymous | GAG to GAU |
| 22051 | Synonymous | GCG to GCU |
| 22335 | Nonsynonymous | UGG to UUG |
| 22436 | Nonsynonymous | GCA to UCA |
| 22468 | Synonymous | ACG to ACU |
| 22661 | Nonsynonymous | GUC to UUC |
| 22785 | Nonsynonymous | AGA to AUA |
| 23120 | Nonsynonymous | GCA to UCA |
| 23242 | Synonymous | CUG to CUU |
| 23405 | Nonsynonymous | GUU to UUU |
| 23593 | Nonsynonymous | CAG to CAU |
| 23755 | Nonsynonymous | AUG to AUU |
| 23856 | Nonsynonymous | CGU to CUU |
| 24095 | Nonsynonymous | GCU to UCU |
| 24348 | Nonsynonymous | AGU to AUU |
| 24368 | Nonsynonymous | GAC to UAC |
| 24755 | Nonsynonymous | GUG to UUG |
| 24794 | Nonsynonymous | GCU to UCU |
| 24928 | Synonymous | GUG to GUU |
| 25249 | Nonsynonymous | AUG to AUU |
| 25250 | Nonsynonymous | GUG to UUG |
| 25302 | Nonsynonymous | UGU to UUU |
| 25305 | Nonsynonymous | UGU to UUU |
| 25429 | Nonsynonymous | UGU to UUU |
| 25494 | Nonsynonymous | GAU to UAU |
| 25523 | Synonymous | CGG to CGU |
| 25534 | Nonsynonymous | UGU to UUU |
| 25563 | Nonsynonymous | GAG to UAG |
| 25606 | Nonsynonymous | AGC to AUC |
| 25644 | Nonsynonymous | GUU to UUU |
| 25677 | Nonsynonymous | GCU to UCU |
| 25691 | Nonsynonymous | UGG to UGU |
| 25740 | Nonsynonymous | GAG to UAG |
| 25767 | Nonsynonymous | GAG to UAG |
| 25770 | Nonsynonymous | GCU to UCU |
| 25775 | Nonsynonymous | UUG to UUU |
| 25785 | Nonsynonymous | GAA to UAA |
| 25979 | Nonsynonymous | UGG to UGU |
| 26063 | Nonsynonymous | UGG to UGU |
| 26109 | Nonsynonymous | GCC to UCC |
| 26144 | Synonymous | CGG to CGU |
| 26233 | Nongene | G to U |
| 26526 | Nonsynonymous | GCA to UCA |
| 26690 | Synonymous | CUG to CUU |
| 26730 | Nonsynonymous | GUU to UUU |
| 26775 | Nonsynonymous | GCU to UCU |
| 27147 | Nonsynonymous | GAC to UAC |
| 27225 | Nonsynonymous | CAG to CAU |
| 27226 | Nonsynonymous | GUU to UUU |
| 27327 | Nonsynonymous | AAG to AAU |
| 27382 | Nonsynonymous | GAU to UAU |
| 27877 | Nonsynonymous | UGU to UUU |
| 28001 | Synonymous | CCG to CCU |
| 28077 | Nonsynonymous | GUG to UUG |
| 28086 | Nonsynonymous | GCU to UCU |
| 28089 | Nonsynonymous | GGU to UGU |
| 28191 | Nonsynonymous | GUG to UUG |
| 28202 | Synonymous | UCG to UCU |
| 28280 | Nonsynonymous | GAU to UAU |
| 28300 | Nonsynonymous | CAG to CAU |
| 28378 | Synonymous | GCG to GCU |
| 28392 | Nonsynonymous | CGU to CUU |
| 28541 | Nonsynonymous | GCU to UCU |
| 28655 | Nonsynonymous | GAC to UAC |
| 28703 | Nonsynonymous | GAU to UAU |
| 28727 | Nonsynonymous | GCU to UCU |
| 28739 | Nonsynonymous | GCA to UCA |
| 28812 | Nonsynonymous | AGU to AUU |
| 28827 | Nonsynonymous | CGU to CUU |
| 28842 | Nonsynonymous | AGU to AUU |
| 28851 | Nonsynonymous | AGU to AUU |
| 28985 | Nonsynonymous | GGC to UGC |
| 29027 | Nonsynonymous | GCU to UCU |
| 29140 | Nonsynonymous | CAG to CAU |
| 29254 | Synonymous | UCG to UCU |
| 29431 | Nonsynonymous | CAG to CAU |
| 29462 | Nonsynonymous | GCU to UCU |
| 29465 | Nonsynonymous | GCA to UCA |
| 29511 | Nonsynonymous | AGU to AUU |
| 29543 | Nongene | G to U |
| 29557 | Nongene | G to U |
| 29628 | Nonsynonymous | CGU to CUU |
| 29688 | Nongene | G to U |
| 29692 | Nongene | G to U |
| 29711 | Nongene | G to U |
| 29736 | Nongene | G to U |
| 29742 | Nongene | G to U |
| 29747 | Nongene | G to U |
| 29764 | Nongene | G to U |
| 29781 | Nongene | G to U |
| 29864 | Nongene | G to U |

Figure S2. Sequence frequency logo based on nucleotide frequencies surrounding G to U mutation sites in SARS-CoV-2 genomes. We see that there is no specific context for these mutations.

