COVID-19 subject 95-267

2021-01-08

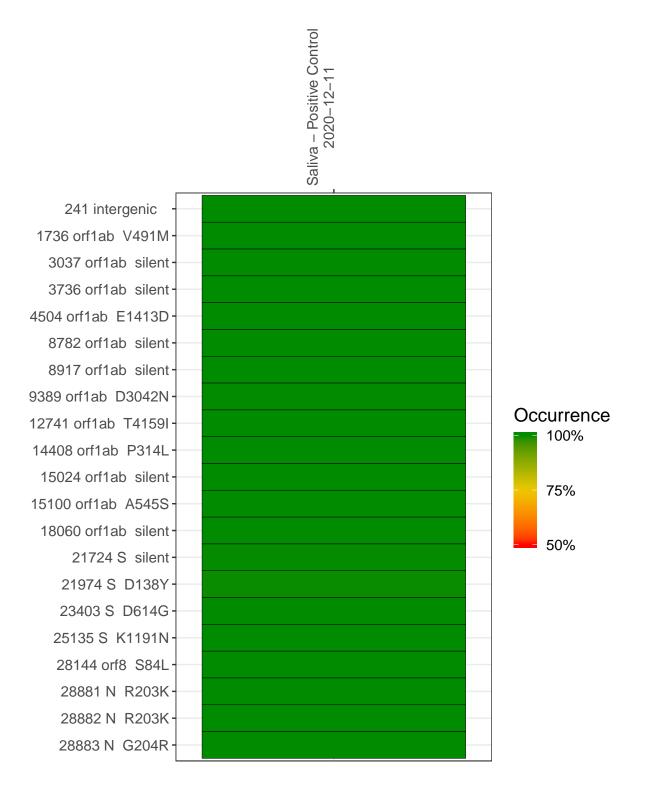
The table below provides a summary of subject samples for which sequencing data is available. The experiments column shows the number of sequencing experiments performed for each specimen. Experiment specific analyses are shown at the end of this report. The code base for this analysis can be found (here).

Table 1. Sample summary.

Experiment	Туре	Input genomes	Sample type	Sample date	Largest contig (KD)	Reference read coverage	Reference read coverage (>= 5 reads)
VSP0545-1	single experiment	NA	Saliva - Positive Control	2020-12-11	22.41	100.0%	97.9%

Variants shared across samples

The heat map below shows how variants (reference genome USA-WA1-2020) are shared across subject samples where the percent variance is colored. Variants are called if a variant position is covered by 5 for more reads, the alternative base is found in > 50% of read pairs and the variant yields a PHRED score > 20. Gray tiles denote positions where the variant was not the major variant or no variants were found. The relative base compositions of each experiment used to calculate tiles are shown in the following plot where the total number of position reads are shown atop of each plot.



Saliva – Positive Control 2020–12–11

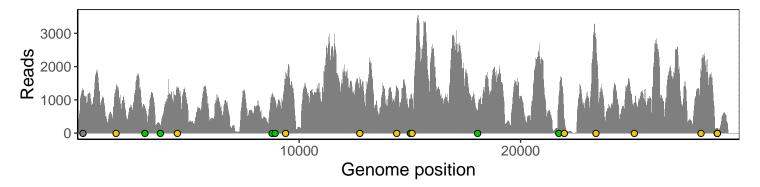
241 intergenic	1267
1736 orf1ab V491M	1399
3037 orf1ab silent	747
3736 orf1ab silent	241
4504 orf1ab E1413D	1344
8782 orf1ab silent	1158
8917 orf1ab silent	903
9389 orf1ab D3042N	1622
12741 orf1ab T4159I	1693
14408 orf1ab P314L	1322
15024 orf1ab silent	1031
15100 orf1ab A545S	1052
18060 orf1ab silent	678
21724 S silent	1126
21974 S D138Y	420
23403 S D614G	2883
25135 S K1191N	863
28144 orf8 S84L	1820
28881 N R203K	128
28882 N R203K	128
28883 N G204R	128
	45-1
	SP0545-1



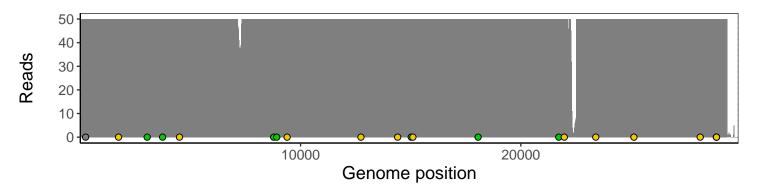
Analyses of individual experiments and composite results.

VSP0545-1 | 2020-12-11 | Saliva - Positive Control | 95-267 | genomes | single experiment

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



Excerpt from plot above focusing on reads coverage from 0 to 50 NT.



The longest five assembled contigs are shown below colored by their edit distance to the reference genome.

