COVID-19 subject SRR11783580

2020-09-29

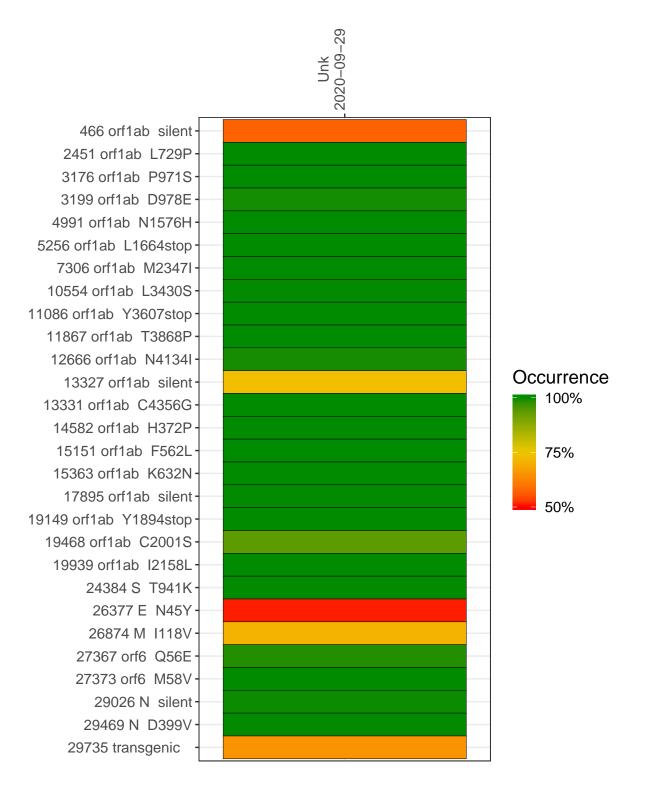
The table below provides a summary of subject samples for which sequencing data is available. The experiments column shows the number of sequencing experiments performed for each specimen. Experiment specific analyses are shown at the end of this report. The code base for this analysis can be found (here).

Table 1. Sample summary.

Experiment	Туре	Input genomes	Sample type	Sample date	Largest contig (KD)	Reference read coverage	Reference read coverage (>= 5 reads)
VSP8026-1	single experiment	NA	Unk	2020-09-29	0.62	35.5%	34.2%

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.



Unk 2020-09-29

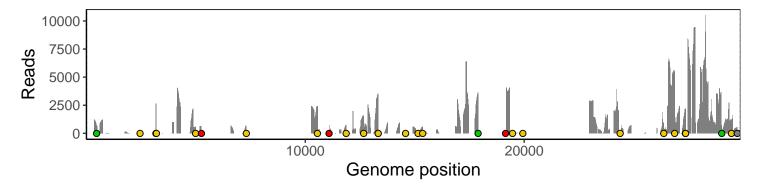
	2020-09-29
466 orf1ab silent	733
2451 orf1ab L729P	172
3176 orf1ab P971S	8
3199 orf1ab D978E	359
4991 orf1ab N1576H	576
5256 orf1ab L1664stop	665
7306 orf1ab M2347I	679
10554 orf1ab L3430S	2410
11086 orf1ab Y3607stop	7
11867 orf1ab T3868P	714
12666 orf1ab N4134I	1569
13327 orf1ab silent	3518
13331 orf1ab C4356G	958
14582 orf1ab H372P	74
15151 orf1ab F562L	177
15363 orf1ab K632N	589
17895 orf1ab silent	3629
19149 orf1ab Y1894stop	22
19468 orf1ab C2001S	63
19939 orf1ab I2158L	64
24384 S T941K	7
26377 E N45Y	917
26874 M I118V	5451
27367 orf6 Q56E	2182
27373 orf6 M58V	28
29026 N silent	748
29469 N D399V	1239
29735 transgenic	566
	VSP8026-1



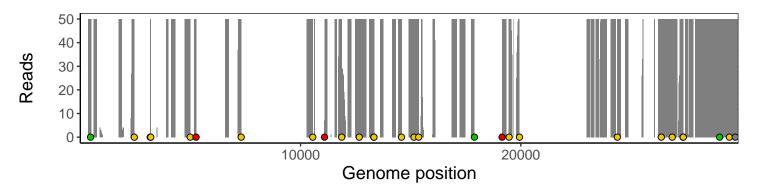
Analyses of individual experiments and composite results.

$VSP8026\text{-}1 \mid 2020\text{-}09\text{-}29 \mid Unk \mid SRR11783580 \mid genomes \mid single \ experiment$

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.

