

CRISPR Manuscript - Supplementary data

- **Analysis of Ct values for 3 different targets (E, N and RdRp)**

Of the all positive (n=261) samples had a positive Ct value for E (range:14 to 40) and N gene (13 to 40) both. Distributions are given below. However, the RdRp had variations. 206 samples had an RdRp value reported and the values ranged from 0 to 43. Three samples had 0 reported on ct value for rdrp (Please see the distribution below. The 3 samples that had 0 value reported on rdrp had 33. 35 and 35 reported for E gene and 38,36 and 36 reported on N gene.

In the categorical analysis, for E and G, I have categorised as ≤ 20 , 21 to 25, 25 to 30, 31 to 35 and >35 . If we go by the same categorization for RdRp, there is marked diff between RdRp and the other 2 targets in the <20 , 21-25 and majorly the >35 categories (Please see table below). RdRp was found to be less sensitive than E and N genes in detecting SARS-CoV-2. It could be because of PCR optimised conditions in a multiplex system favours E gene amplification.

| | Ct E gene | | CT N gene | | RdRP gene | |
|--------------|------------|------------|------------|------------|------------|------------|
| | N | % | N | % | N | % |
| <20 | 32 | 12.26 | 28 | 10.73 | 14 | 6.8 |
| 21-25 | 50 | 19.16 | 49 | 18.77 | 18 | 8.74 |
| 26 to 30 | 77 | 29.5 | 73 | 27.97 | 56 | 27.18 |
| 31 to 35 | 77 | 29.5 | 85 | 32.57 | 56 | 27.18 |
| ≥ 36 | 25 | 9.58 | 26 | 9.96 | 62 | 30.1 |
| Total | 261 | 100 | 261 | 100 | 206 | 100 |

Table S3: Analysis of Ct values among different target genes

- **Distribution E gene**

CT-E GENE | Freq. Percent Cum.

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| | | | |
|----|----|------|-------|
| 14 | 1 | 0.38 | 0.38 |
| 15 | 6 | 2.30 | 2.68 |
| 16 | 2 | 0.77 | 3.45 |
| 17 | 7 | 2.68 | 6.13 |
| 18 | 5 | 1.92 | 8.05 |
| 19 | 5 | 1.92 | 9.96 |
| 20 | 6 | 2.30 | 12.26 |
| 21 | 8 | 3.07 | 15.33 |
| 22 | 11 | 4.21 | 19.54 |
| 23 | 10 | 3.83 | 23.37 |
| 24 | 8 | 3.07 | 26.44 |
| 25 | 13 | 4.98 | 31.42 |
| 26 | 18 | 6.90 | 38.31 |
| 27 | 11 | 4.21 | 42.53 |
| 28 | 18 | 6.90 | 49.43 |
| 29 | 12 | 4.60 | 54.02 |
| 30 | 18 | 6.90 | 60.92 |
| 31 | 13 | 4.98 | 65.90 |
| 32 | 14 | 5.36 | 71.26 |
| 33 | 19 | 7.28 | 78.54 |
| 34 | 18 | 6.90 | 85.44 |
| 35 | 13 | 4.98 | 90.42 |

| | | | |
|----|----|------|--------|
| 36 | 4 | 1.53 | 91.95 |
| 37 | 10 | 3.83 | 95.79 |
| 38 | 6 | 2.30 | 98.08 |
| 39 | 3 | 1.15 | 99.23 |
| 40 | 2 | 0.77 | 100.00 |

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Total | 261 100.00

• **Distribution N gene**

| CT-N GENE | Freq. | Percent | Cum. |
|-----------|-------|---------|------|
|-----------|-------|---------|------|

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| | | | |
|----|----|------|-------|
| 13 | 1 | 0.38 | 0.38 |
| 14 | 1 | 0.38 | 0.77 |
| 15 | 6 | 2.30 | 3.07 |
| 16 | 2 | 0.77 | 3.83 |
| 17 | 7 | 2.68 | 6.51 |
| 18 | 3 | 1.15 | 7.66 |
| 19 | 3 | 1.15 | 8.81 |
| 20 | 5 | 1.92 | 10.73 |
| 21 | 7 | 2.68 | 13.41 |
| 22 | 6 | 2.30 | 15.71 |
| 23 | 9 | 3.45 | 19.16 |
| 24 | 8 | 3.07 | 22.22 |
| 25 | 19 | 7.28 | 29.50 |
| 26 | 15 | 5.75 | 35.25 |

| | | | |
|----|----|------|--------|
| 27 | 11 | 4.21 | 39.46 |
| 28 | 24 | 9.20 | 48.66 |
| 29 | 13 | 4.98 | 53.64 |
| 30 | 10 | 3.83 | 57.47 |
| 31 | 20 | 7.66 | 65.13 |
| 32 | 12 | 4.60 | 69.73 |
| 33 | 21 | 8.05 | 77.78 |
| 34 | 20 | 7.66 | 85.44 |
| 35 | 12 | 4.60 | 90.04 |
| 36 | 13 | 4.98 | 95.02 |
| 37 | 5 | 1.92 | 96.93 |
| 38 | 5 | 1.92 | 98.85 |
| 39 | 2 | 0.77 | 99.62 |
| 40 | 1 | 0.38 | 100.00 |

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Total | 261 100.00

• **Distribution RdRp gene**

| CT-RdRp | Freq. | Percent | Cum. |
|---------|-------|---------|-------|
| 0 | 3 | 1.46 | 1.46 |
| 18 | 2 | 0.97 | 2.43 |
| 19 | 1 | 0.49 | 2.91 |
| 20 | 8 | 3.88 | 6.80 |
| 21 | 4 | 1.94 | 8.74 |
| 22 | 3 | 1.46 | 10.19 |
| 23 | 3 | 1.46 | 11.65 |
| 24 | 2 | 0.97 | 12.62 |
| 25 | 6 | 2.91 | 15.53 |
| 26 | 7 | 3.40 | 18.93 |
| 27 | 8 | 3.88 | 22.82 |
| 28 | 11 | 5.34 | 28.16 |

| | | | |
|----|----|-------|--------|
| 29 | 8 | 3.88 | 32.04 |
| 30 | 22 | 10.68 | 42.72 |
| 31 | 13 | 6.31 | 49.03 |
| 32 | 11 | 5.34 | 54.37 |
| 33 | 11 | 5.34 | 59.71 |
| 34 | 9 | 4.37 | 64.08 |
| 35 | 12 | 5.83 | 69.90 |
| 36 | 15 | 7.28 | 77.18 |
| 37 | 11 | 5.34 | 82.52 |
| 38 | 13 | 6.31 | 88.83 |
| 39 | 9 | 4.37 | 93.20 |
| 40 | 12 | 5.83 | 99.03 |
| 41 | 1 | 0.49 | 99.51 |
| 43 | 1 | 0.49 | 100.00 |

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|-------|-----|--------|--|
| Total | 206 | 100.00 | |
|-------|-----|--------|--|