**Supplementary Table: 1**

Antigen details used for specificity study

|  |  |  |  |
| --- | --- | --- | --- |
| **Antigen details** | **Batch. no.** | **Source** | **Storage(°C)** |
| **Wuhan variant virus****(Working stock)** | 14141D001 | In-House | -196 or below |
| **CRM197 protein** | IHWS/0.4mg/ml CRM/20/01 | In-House | -20 |

 Blank human serum details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Details** | **Batch. no.** | **Product No.**  | **Source** | **Storage** |
| **Blank human serum** | 0000083106 | S5393 | Sigma | 2-8° C. |

Supplementary Table 2: Values of Reference Standard 1 in MSD Arbitrary units (AU/ml).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Antigens** | **CAL-01** | **CAL-02** | **CAL-03** | **CAL-04** | **CAL-05** | **CAL-06** | **CAL-07** | **CAL-08** |
| **W-S** | 72 | 18 | 4.5 | 1.13 | 0.281 | 0.0703 | 0.0176 | 0 |
| **SA-RBD (B.1.351)** | 4.4 | 1.1 | 0.275 | 0.0688 | 0.0172 | 0.0043 | 0.00107 | 0 |
| **W-N** | 70 | 17.5 | 4.38 | 1.09 | 0.273 | 0.0684 | 0.0171 | 0 |
| **Br-RBD (P.1)** | 7.0 | 1.75 | 0.438 | 0.109 | 0.0273 | 0.00684 | 0.00171 | 0 |
| **UK-RBD (B.1.1.7)** | 18 | 4.5 | 1.13 | 0.281 | 0.0703 | 0.0176 | 0.00439 | 0 |
| **Br-S (P.1)** | 29 | 7.25 | 1.81 | 0.453 | 0.113 | 0.0283 | 0.00708 | 0 |
| **UK-S (B.1.1.7)** | 44 | 11 | 2.75 | 0.688 | 0.172 | 0.043 | 0.0107 | 0 |
| **SA-S (B.1.351)** | 25 | 6.25 | 1.56 | 0.391 | 0.0977 | 0.0244 | 0.0061 | 0 |
| **W-RBD** | 29 | 7.25 | 1.81 | 0.453 | 0.113 | 0.0283 | 0.00708 | 0 |

W-N, Wuhan Nucleocapsid; W-RBD, Wuhan receptor binding domain (RBD); W-S, Wuhan Spike (S); Br-RBD [P.1], Brazil RBD; Br-S [P.1], Brazil S; UK-RBD [B.1.1.7], United Kingdom RBD; UK-S [B.1.1.7], United Kingdom S; SA-RBD [B.1.351], South Africa RBD; SA-S [B.1.351] South Africa S.

Supplementary Table 3: Assigned values (AU/ml) for sera panel

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample ID** |  **W-N** |  **W-S** |  **W-RBD** |  **UK-S [B.1.1.7]** |  **UK-RBD [B.1.1.7]** |  **SA-S [B.1.351]** |  **SA-RBD [B.1.351]** |  **Br-S [P.1]** |  **Br-RBD [P.1]** |
| **Sample 1** | 7962 | 47192 | 15314 | 42996 | 15076 | 25790 | 3978 | 26232 | 6513 |
| **Sample 2** | 206 | 2740 | 878 | 1794 | 953 | 1474 | 637 | 1562 | 737 |
| **Sample 3** | 11168 | 35902 | 10717 | 34240 | 8799 | 10131 | 4247 | 19532 | 7065 |
| **Sample 4** | 974 | 2960 | 1207 | 2267 | 1257 | 2125 | 801 | 1970 | 1144 |
| **Sample 5** | 93756 | 493127 | 236403 | 482255 | 263854 | 351300 | 174488 | 357748 | 250290 |
| **Sample 6** | 40675 | 52522 | 21619 | 48303 | 21832 | 50230 | 14690 | 34269 | 17854 |
| **Sample 7** | 4896 | 3297 | 790 | 2334 | 694 | 1882 | 233 | 2961 | 352 |
| **Sample 8** | 45344 | 27350 | 7971 | 17918 | 5658 | 9616 | 2155 | 11526 | 3381 |
| **Sample 9** | 130339 | 94318 | 21859 | 79280 | 20147 | 61017 | 5195 | 58047 | 9520 |

W-N, Wuhan Nucleocapsid; W-RBD, Wuhan receptor binding domain (RBD); W-S, Wuhan Spike (S); Br-RBD [P.1], Brazil RBD; Br-S [P.1], Brazil S; UK-RBD [B.1.1.7], United Kingdom RBD; UK-S [B.1.1.7], United Kingdom S; SA-RBD [B.1.351], South Africa RBD; SA-S [B.1.351] South Africa S.