

PRODUCT INFORMATION

|                              |  |
|------------------------------|--|
| Target                       | S protein RBD  |
| Synonyms                     | SARS-CoV-2 B.1.617.2 (Delta) Spike RBD Protein   |
| Description                  | Recombinant SARS-CoV-2 RBD(L452R,T478K) protein with C-terminal human Fc tag   |
| Delivery                     | In Stock   |
| Uniprot ID                   | P0DTC2   |
| Expression Host              | HEK293   |
| Tag                          | C-Human Fc Tag   |
| Molecular Characterization   | S protein RBD(L452Rand T487K)(Arg319-Phe541) hFc(Glu99-Ala330)<br><br>The protein has a predicted molecular mass of 51.2 kDa after removal of the signal peptide.The apparent molecular mass of RBD(L452Rand T487K)-hFc is approximately 55-70 kDa due to glycosylation.   |
| Molecular Weight             |  |
| Purity                       | The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.   |
| Formulation & Reconstitution | Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.   |
| Storage & Shipping           | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.  |
| Background                   | SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) also known as Covid19 (2019 Novel Coronavirus) is a virus that causes illnesses ranging from the common cold to severe diseases. The spike protein is a type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which accounts for recognizing the cell surface receptor, ACE2. S2 contains basic elements needed for the membrane fusion. Recent publications indicate that S1-RBD domain can induce virus neutralizing-antibody and T cell response. |
| Usage                        | Research use only  |
| Conjugate                    | Unconjugated   |



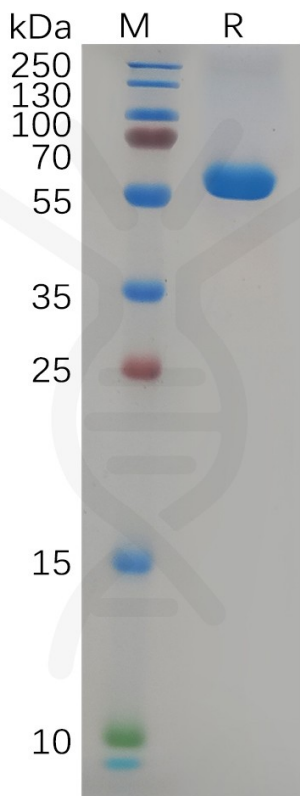


Figure 1. SARS-CoV-2 (2019-nCoV) S protein RBD(L452R & T487K), hFc Tag on SDS-PAGE under reducing condition.

**CoV-2 (Delta) S-RBD, hFc Tagged protein ELISA**  
0.2 µg of CoV-2 (Delta) S-RBD, hFc tagged protein per well

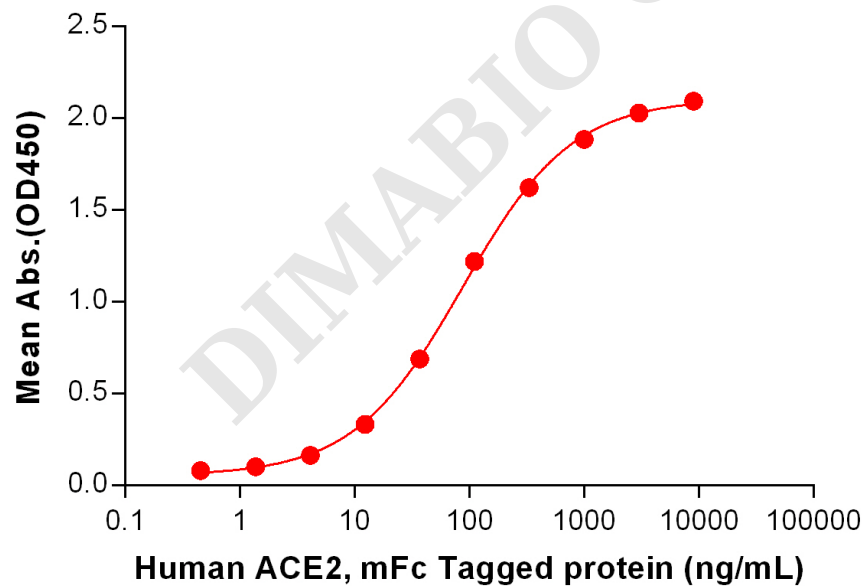


Figure 2. ELISA plate pre-coated by 2 µg/mL (100 µL/well) SARS-CoV-2 (Delta) S protein RBD , hFc Tag (PME100658) can bind Human ACE2 Protein, mFc Tag PME100072 in a linear range of 4.115-3000 ng/mL.



**CoV-2 (Delta) S-RBD, hFc Tagged protein ELISA**

0.2 µg of CoV-2 (Delta) S-RBD, hFc tagged protein per well

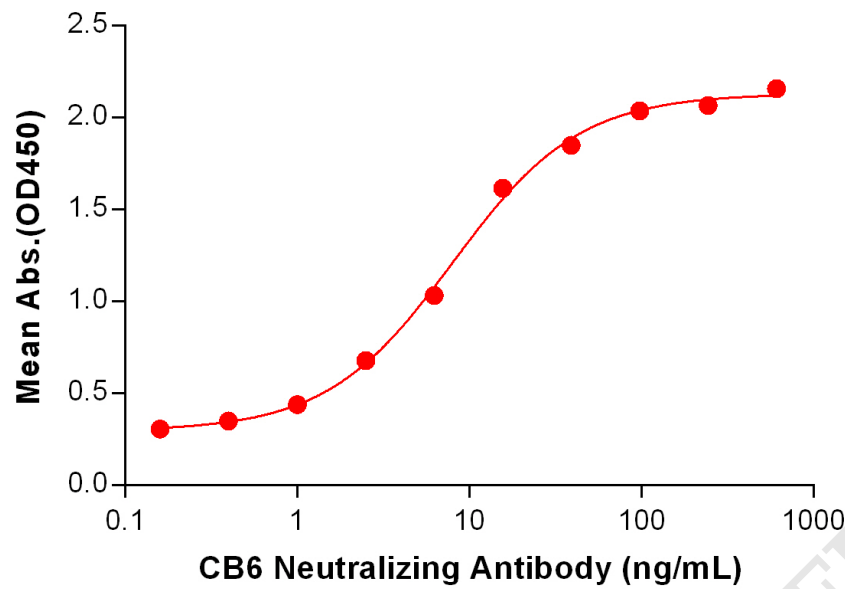


Figure 3. ELISA plate pre-coated by 2 µg/mL (100 µL/well) SARS-CoV-2 (Delta) S protein RBD , hFc Tag (PME100658) can bind Anti-SARS-CoV-2 (CB6 biosimilar) mAb BME100011 in a linear range of 1.00-97.66 ng/mL.

**CoV-2 (Delta) S-RBD, hFc Tagged protein ELISA**

0.2 µg of CoV-2 (Delta) S-RBD, hFc tagged protein per well

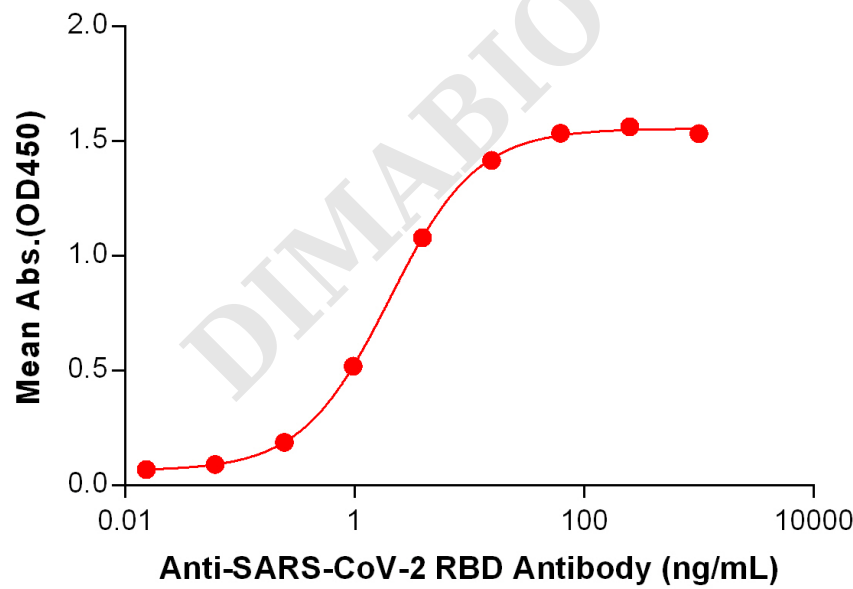


Figure 4. ELISA plate pre-coated by 2 µg/mL (100 µL/well) SARS-CoV-2 (Delta) S protein RBD , hFc Tag (PME100658) can bind Anti-SARS-CoV-2 RBD antibody (DM55), Rabbit mAb DME100055 in a linear range of 0.244-15.625 ng/mL.

