

PRODUCT INFORMATION

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| Target | S protein RBD |
| Synonyms | S protein RBD;Spike glycoprotein Receptor-binding domain;S glycoprotein RBD;Spike protein RBD;COVID-19 |
| Description | Recombinant SARS-CoV-2 (2019-nCoV) S protein RBD 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(Arg319-Phe541) hFc(Glu99-Ala330) |
| Molecular Weight | The protein has a predicted molecular mass of 51.2 kDa after removal of the signal peptide. |
| 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 |



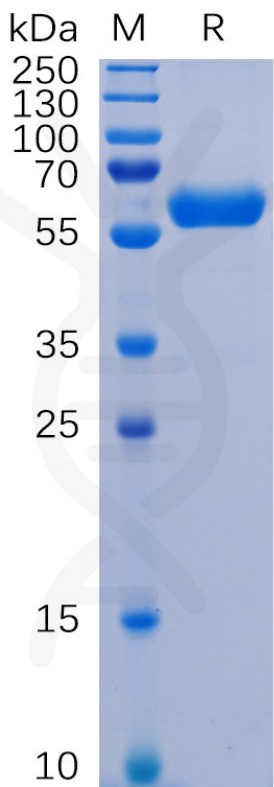


Figure 1. SARS-CoV-2 (2019-nCoV) S protein RBD, hFc Tag on SDS-PAGE under reducing condition.

S-RBD, hFc Tagged protein ELISA

0.2 µg of S-RBD, hFc Tagged protein per well

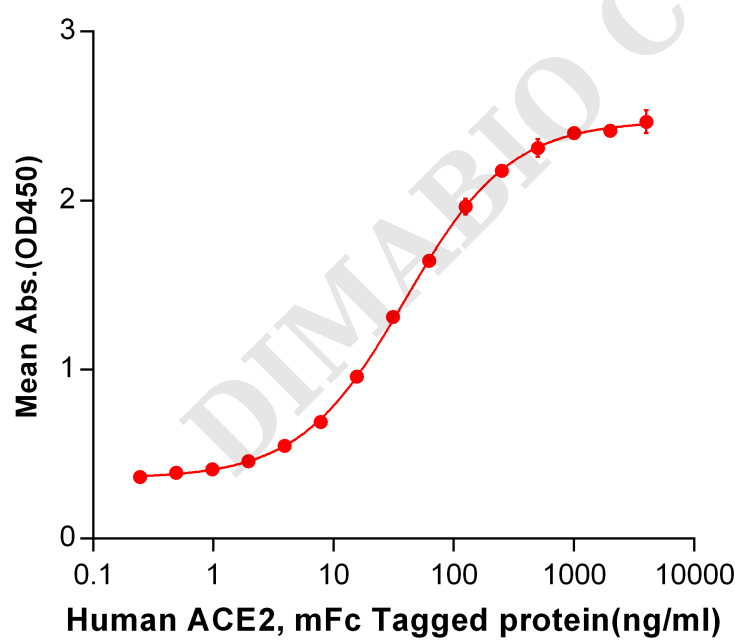


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) S-RBD, hFc tagged protein (PME100487) can bind Human ACE2, mFc Tagged protein PME100072 in a linear range of 0.976-39.35 ng/ml.



Human RBD, hFc Tagged protein ELISA
0.2 µg of ACE2, His Tagged protein per well

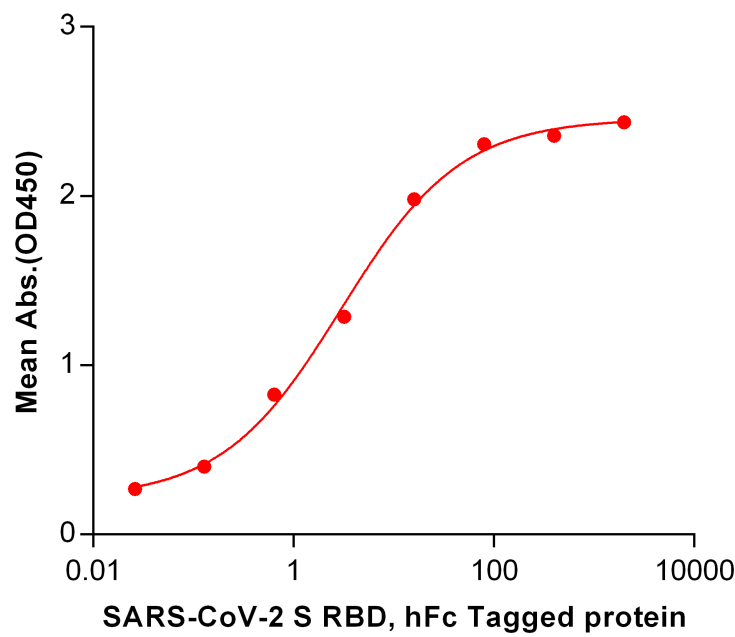


Figure 3. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human ACE2, His Tagged protein PME100490 can bind S-RBD, hFc tagged protein (PME100487) in a linear range of 0.128-80.0 ng/ml.

