

**PRODUCT INFORMATION**

<b>Target</b>	S protein RBD
<b>Synonyms</b>	S protein RBD;Spike glycoprotein Receptor-binding domain;S glycoprotein RBD;Spike protein RBD;COVID-19
<b>Description</b>	Recombinant SARS-CoV-2 (2019-nCoV) S protein RBD protein with C-terminal human Fc tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P0DTC2
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-Human Fc Tag
<b>Molecular Characterization</b>	S protein RBD(Arg319-Phe541) hFc(Glu99-Ala330)
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 51.2 kDa after removal of the signal peptide.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage &amp; Shipping</b>	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.
<b>Background</b>	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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



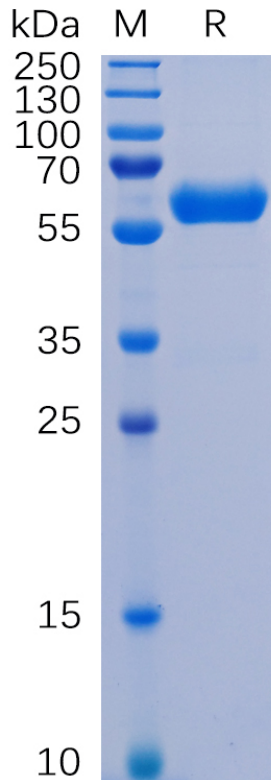


Figure 1. SARS-CoV-2 (2019-nCoV) S protein RBD, hFc Tag on SDS-PAGE under reducing condition.

### S-RBD, hFc Tagged protein ELISA

0.2  $\mu$ g of S-RBD, hFc Tagged protein per well

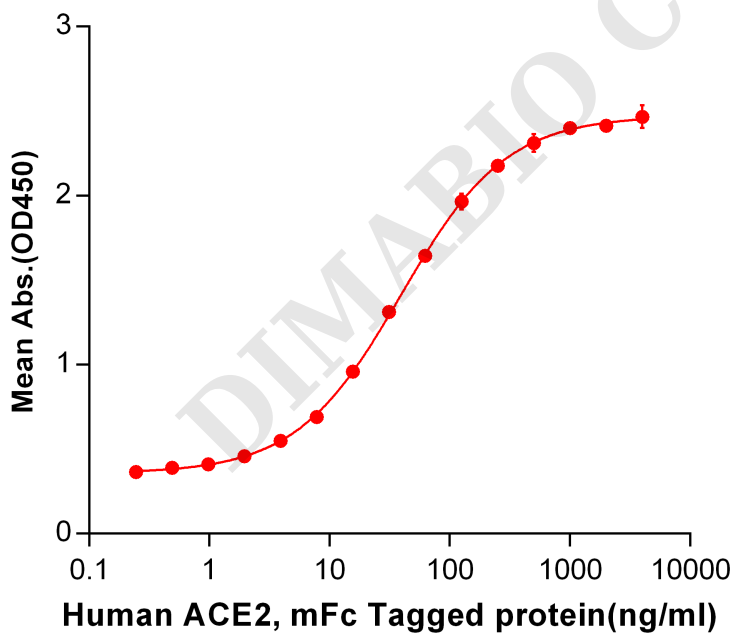


Figure 2. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) S-RBD, hFc tagged protein (PME100487) can bind Human ACE2, mFc Tagged protein PME100072 in a linear range of 0.976-39.35 ng/ml.



## Human RBD, hFc Tagged protein ELISA

0.2  $\mu$ g of ACE2, His Tagged protein per well

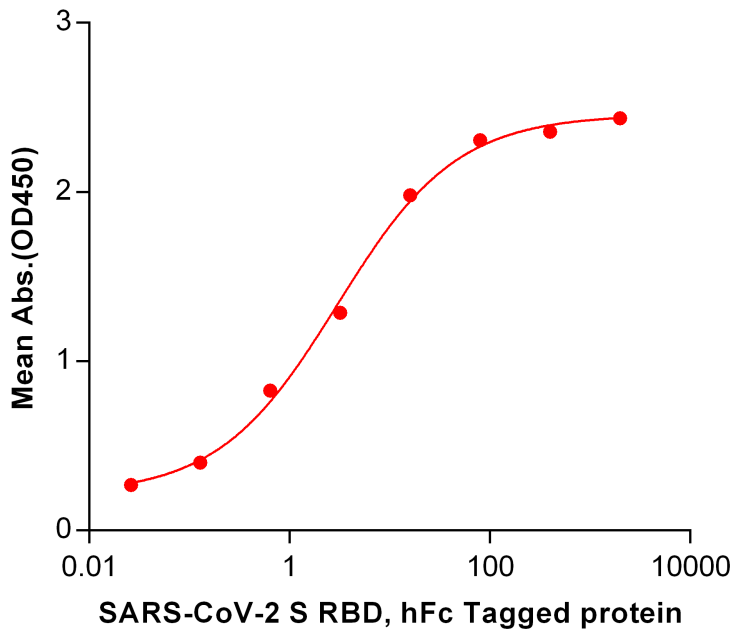


Figure 3. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) Human ACE2, His Tagged protein PME100490 can bind S-RBD, hFc tagged protein (PME100487) in a linear range of 0.128-80.0 ng/ml.

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