PRODUCT INFORMATION

Target	S protein RBD
Synonyms	SARS-CoV-2 B.1.351 (Beta) Spike RBD Protein
Description	Recombinant SARS-CoV-2 S protein RBD(K417N, E484K,N501Y) 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(K417N, E484K,N501Y)(Arg319-Phe541) hFc(Glu99-Ala330)
Molecular Weight	The protein has a predicted molecular mass of 51.3 kDa after removal of the signal peptide.The apparent molecular mass of RBD(K417N, E484K,N501Y)-hFc is approximately 55-70 kDa due to glycosylation.
Purity	The purity of the protein is greater than 90% 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

DIMA CONFIDENTIAL

Address: Wuhan institute of Biotechnology B7, Biolake No.666 Gaoxin Road, Wuhan, Hubei, China
Telephone: +1 2409940618(USA)
/+86-18062749453(China)
/+86-400-006-0995(China)

Email: info@dimabio.com
Website: www.dimabio.com

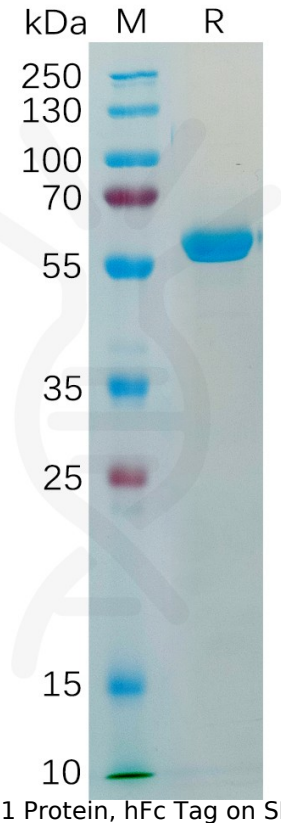


Figure 1. Human TM4SF1 Protein, hFc Tag on SDS-PAGE under reducing condition.

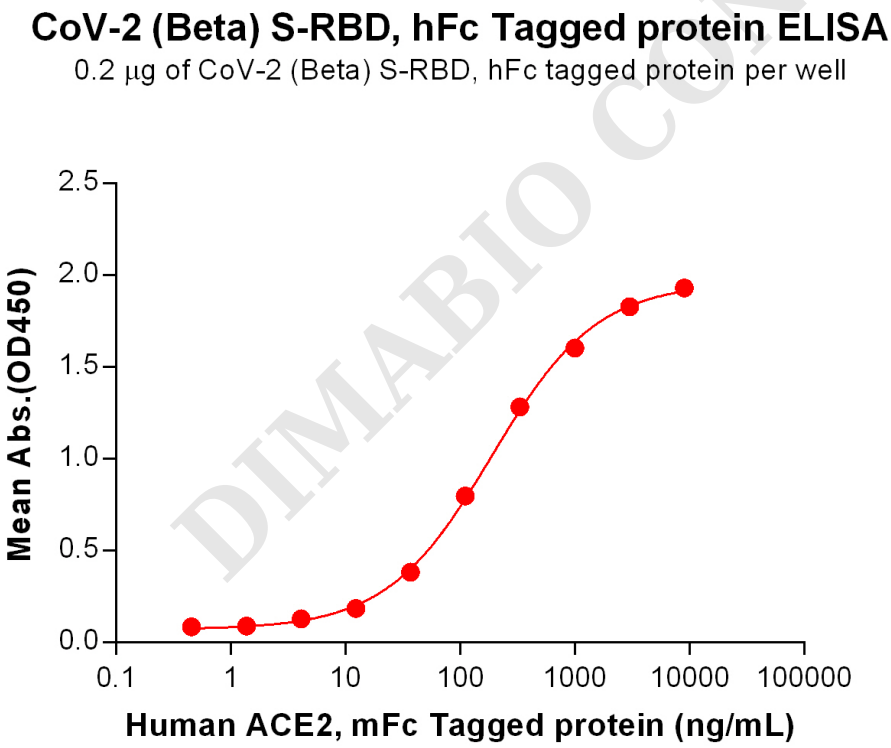


Figure 2. ELISA plate pre-coated by 2 μg/mL (100 μL/well) SARS-CoV-2 (Beta) S protein RBD, hFc Tag (PME100539) can bind Human ACE2 Protein, mFc Tag (PME100072) in a linear range of 12.346–3000 ng/mL.

DIMABIO CONFIDENTIAL

Address: Wuhan institute of Biotechnology B7, Biolake No.666 Gaoxin Road, Wuhan, Hubei, China
Telephone: +1 2409940618(USA) /+86-18062749453(China) /+86-400-006-0995(China)

Email: info@dimabio.com
Website: www.dimabio.com

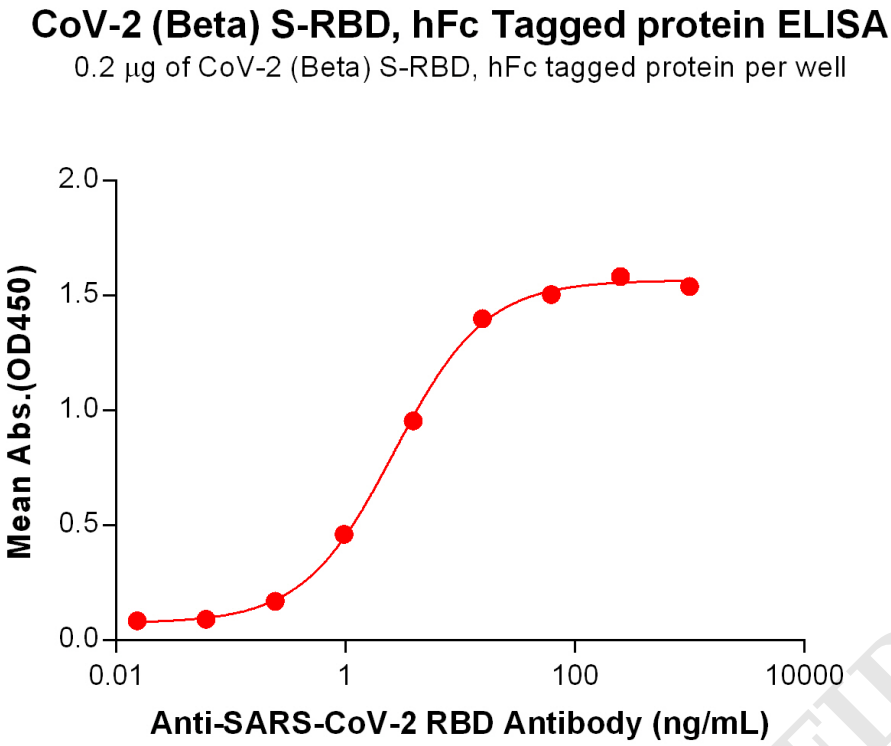


Figure 3. ELISA plate pre-coated by 2 μg/mL (100 μL/well) SARS-CoV-2 (Beta) S protein RBD, hFc Tag (PME100539) can bind Anti-SARS-CoV-2 RBD antibody (DM55), Rabbit mAb (DME100055) in a linear range of 0.244–15.625 ng/mL.

DIMABIO CONFIDENTIAL

Address: Wuhan institute of Biotechnology B7, Biolake No.666 Gaoxin Road, Wuhan, Hubei, China
Telephone: +1 2409940618(USA)
/+86-18062749453(China)
/+86-400-006-0995(China)

Email: info@dimabio.com
Website: www.dimabio.com