SARS-COV-2 (BETA) S PROTEIN RBD, HFC TAG

Cat.#: 11339
Product Name: SARS-CoV-2 (Beta) S Protein RBD
Size : 10 µg, 50 µg and 100 µg
Synonyms: SARS-CoV-2 B.1.351 (Beta) Spike RBD Protein
Target: S protein RBD
UNIPROT ID: P0DTC2
Description: "Recombinant SARS-CoV-2 S protein RBD(K417N
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.
Species/Host: HEK293
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.
Molecular Characterization: S protein RBD(K417N, E484K,N501Y)(Arg319-Phe541) hFc(Glu99-Ala330)
Purity: The purity of the protein is greater than 90% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.
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.

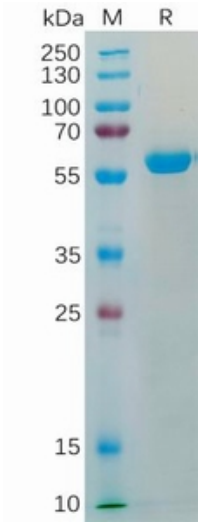

Figure 1. SARS-CoV-2 (2019-nCoV) S protein RBD (K417N, E484Kï¼ˆN501Y), hFc Tag on SDS-PAGE under reducing condition.

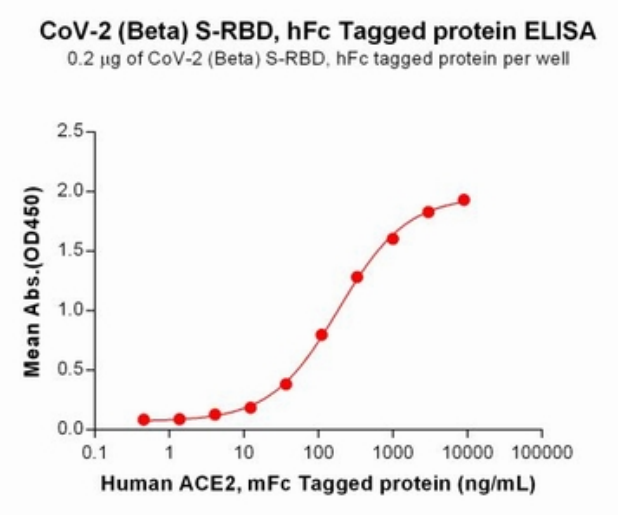

Figure 2. ELISA plate pre-coated by 2 μg/ml (100 μl/well) SARS-CoV-2 (Beta) S protein RBD, hFc Tag (11339) can bind Human ACE2 Protein, mFc Tag (11195) in a linear range of 12.346-3000 ng/mL.

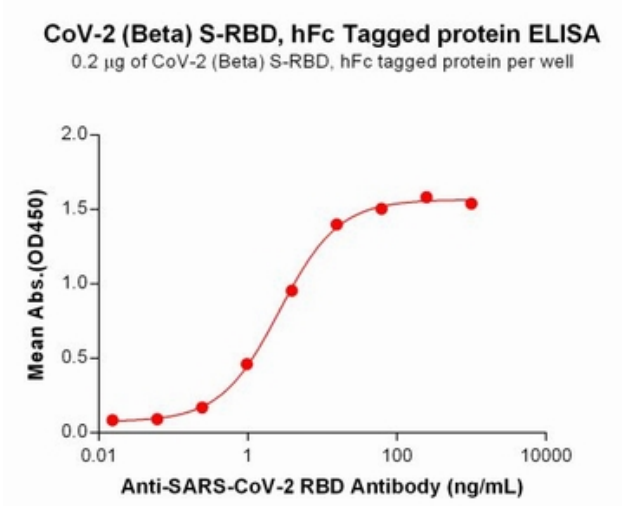

Figure 3. ELISA plate pre-coated by 2 μg/ml (100 μl/well) SARS-CoV-2 (Beta) S protein RBD, hFc Tag (11339) can bind Anti-SARS-CoV-2 RBD antibody (DM55), Rabbit mAb (28354) in a linear range of 0.244-15.625 ng/mL.