

Recombinant SARS-CoV 2 Spike RBD_P330S mFc-Chimera

| | | |
|-----------------------------|--|--|
| Cat. No. | Ab-P0034 | two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. |
| Size | 100 µg | |
| Host Species | Human | In previous studies, a number of potent monoclonal antibodies against SARS coronavirus (SARS-CoV) have been identified. These antibodies target more specifically the 193 amino acid length (N318-V510) receptor binding domain (RBD) within the S protein is the critical target for neutralizing antibodies. Some of the antibodies recognize different epitopes on RBD, for example the SARS-CoV neutralizing antibodies CR3014 and CR3022 bound noncompetitively to the SARS-CoV RBD and neutralized the virus in a synergistic fashion. |
| Expression Host | 293F | |
| Protein construction | A DNA sequence encoding SARS-CoV-2 (2019-nCoV) spike protein (RBD) (YP_009724390.1) (Ser325-Lys529) substituted P330S fused with the Fc region of mouse IgG2a in C-terminus. | |
| Purity | >95% as determined by SDS-PAGE | Reference 1) Xialong Tian et al. (2020) Emerging Micorobes & Infections. Vol9 381 2) Meng Yuan et al. (2020) Science. 368:630 |
| Formulation | 0.22µm filtered solution in PBS pH7.4 | |
| Storage | Store it under sterile condition at -70°C upon receiving. Recommend to aliquot the protein in to smaller quantities for storage. Avoid repeated freeze –thaw cycles. | |
| Molecular Mass | The recombinant SARS-CoV-2 (2019-nCoV) Spike Protein (RBD, mFc fusion) consists of 443 amino acids and predicts a molecular mass of 49.8 kDa. | |

Background

The Spike protein (S) of and SL-CoVs, which is a type I transmembrane glycoprotein and mediates the entrance to human respiratory epithelial cells by interacting with cell surface receptor such as angiotensin-converting enzyme 2 (ACE2)

The Spike protein is a large type I transmembrane protein containing