

## Recombinant SARS-CoV 2 Spike RBD\_ N439K mFc-Chimera

<b>Cat. No.</b>	<b>Ab-P0042</b>	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.
<b>Size</b>	100 µg	
<b>Host Species</b>	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.
<b>Expression Host</b>	293F	
<b>Protein construction</b>	A DNA sequence encoding SARS-CoV-2 (2019-nCoV) spike protein (RBD) (YP_009724390.1) (Ser325-Lys529) substituted N439K fused with the Fc region of mouse IgG2a in C-terminus.	
<b>Purity</b>	>95% as determined by SDS-PAGE	<b>Reference</b> 1) Xialong Tian et al. (2020) Emerging Micorobes & Infections. Vol9 381 2) Meng Yuan et al. (2020) Science. 368:630
<b>Formulation</b>	0.22µm filtered solution in PBS pH7.4	
<b>Storage</b>	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.	
<b>Molecular Mass</b>	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