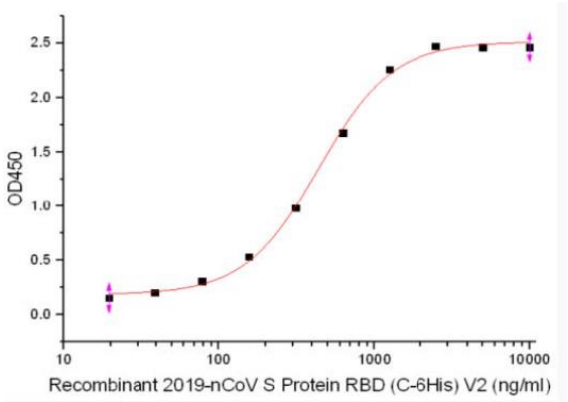
2019-nCoV S Protein RBD (Mammalian, C-6His) V2

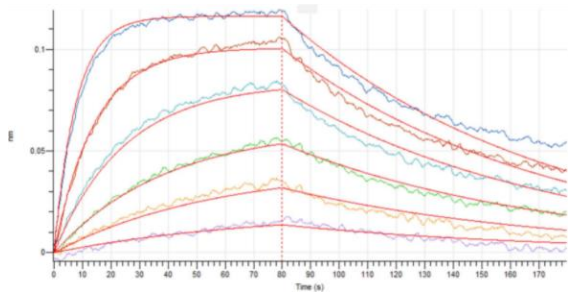
Catalog No: DRA72

Description	Recombinant 2019-nCoV S protein RBD Protein is produced by our Mammalian expression system and the target gene encoding Arg319-Phe541 is expressed with a 6His tag at the C-terminus.
Expression System	Human cells
Alternative name	2019-nCov RBD Protein; 2019-nCoV Spike RBD Protein
Accession No.	QHD43416.1
Predicted Molecular Weight	25.9kDa
Apparent Molecular Weight	35kDa, reducing conditions.
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE.
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH 7.4.
Shipping	The product is shipped on dry ice pack. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Background	The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. Most notable is severe acute respiratory syndrome (SARS). The severe acute respiratory syndrome-coronavirus (SARS-CoV) spike (S) glycoprotein alone can mediate the membrane fusion required for virus entry and cell fusion. It is also a major immunogen and a target for entry inhibitors. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing 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. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Bioactivity



Immobilized 2019-nCoV S Protein RBD-His V2 (Cat#DRA72) at 5μg/ml (100 μl/well) can bind Human ACE-2-Fc(Cat#C05Y).The ED50 of Recombinant Human ACE-2-Fc(Cat#C05Y) is 417 ng/ml.



Loaded Human ACE-2-Fc(Cat#C05Y) on Protein A Biosensor, can bind 2019-nCoV S Protein RBD V2-His(Cat#DRA72) with an affinity constant of 17.85 nM as determined in BLI assay.