# Recombinant 2019-nCoV S Protein RBD (N501Y, C-Fc)

**Catalog No:** DRA121

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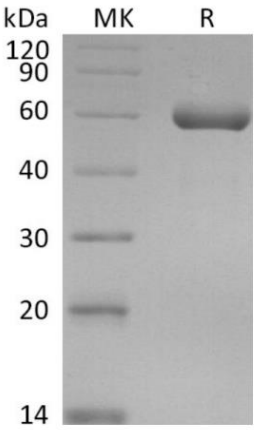
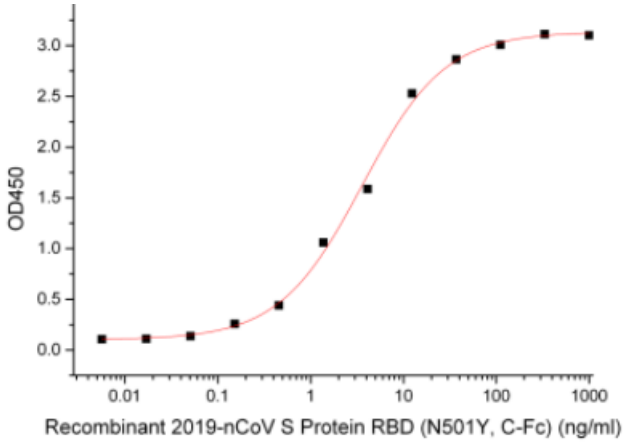
| **Description** | Recombinant 2019-nCoV S-RBD is produced by our Mammalian expression system and the target gene encoding Arg319-Phe541(N501Y) is expressed with a Fc tag at the C-terminus. |
| **Expression System** | Human cells |
| **Alternative name** | 2019-nCov RBD Protein; 2019-nCoV Spike RBD Protein; 2019-nCoV S Protein RBD; 2019-nCoV S-RBD |
| **Accession No.** | QHD43416.1 |
| **Predicted Molecular Weight** | 52.1kDa |
| **Apparent Molecular Weight** | 58-65kDa, 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.<br>Upon receipt, store it immediately at the temperature listed below. |
| **Storage** | Store at < -20°C, stable for 6 months after receipt.<br>Please minimize freeze-thaw cycles. |
| **Purification** | Affinity purification chromatography |
| **Application** | Immunogen, calibrator or standard |
| **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. |

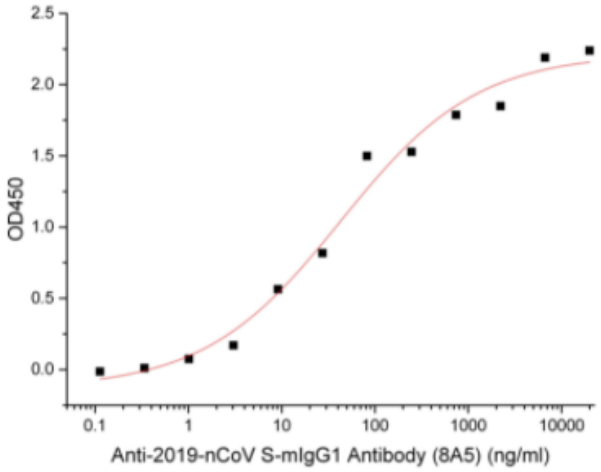
**SDS PAGE**



## Bioactivity-ELISA




Immobilized Human ACE-2-His(Cat#C419) at 2μg/ml (100 μl/well)can bind 2019-nCoV S Protein RBD (N501Y, C-Fc)(Cat#DRA121). The ED50 of 2019-nCoV S Protein RBD (N501Y, C-Fc)(Cat#DRA121)is 3.57 ng/ml




Immobilized 2019-nCoV S Protein RBD (N501Y, C-Fc)(Cat#DRA121)at 2μg/ml (100 μl/well)can bind Anti-2019-nCoV S-mIgG1 Antibody (8A5)(Cat#DA035). The ED50 of Anti-2019-nCoV S-mIgG1 Antibody (8A5)(Cat#DA035)is 42.89 ng/ml.