Recombinant 2019-nCoV Spike Protein (RBD-SD1, Avi-His Tag) (Active)

Catalog No: RPES0015 **Category**: Recombinant Protein

Bio-Activity:
Immobilized Human ACE-2-Fc(Cat# RPES0028) at 10µg/ml (100 µl/well) can bind Recombinant 2019-nCoV S1 Protein (mFc Tag) (Cat#RPES0015). The ED50 of RPES0015 is 0.19 ug/ml.

Sequence Information

Species: Virus

Sequence: Gln14-Arg685

Accession: QHD43416.1

Tag: C-mFc

Product Information

Synonyms: 2019-nCov RBD Protein; 2019-nCoV S RBD Protein

Source: Human Cells

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Formulation: Supplied as a 0.2 µM filtered solution of PBS, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt; store it immediately at<-20°C.

Background

Protein S (PROS1) is glycoprotein and expressed in many cell types supporting its reported involvement in multiple biological processes that include coagulation, apoptosis, cancer development and progression, and the innate immune response. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2, DPP4, CEACAM etc.. 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.

Image