Recombinant 2019-nCoV S1 Protein (C-Fc)

Catalog No: DRA37

Description	Recombinant 2019-nCoV S1 Protein is produced by our Mammalian expression system and the target gene encoding Gln14-Arg685 is expressed with a Fc tag at the C-terminus.
Source	Human Cells
Alternative name	S1 protein; 2019-nCoV S1 protein; coronavirus S1 Protein; cov S1 Protein
Accession No.	QHD43416.1
Predicted Molecular Weight	102.2kDa
AP Molecular Weight	130-140kDa, reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Quality Control	Purity: Greater than 85% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Shipping	The product is shipped on dry ice pack. Upon receipt, store it immediately at the temperature listed below.
Storage	Reconstituted protein solution should be stored 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.