ATAGENIX LABORATORIES

Recombinant SARS-CoV-2(2019-nCoV)

Spike protein fragment 1

Catalog Number: ATEP02449COV

Overview

Description	Recombinant SARS-CoV-2 Spike protein fragment 1 is produced by E.coli expression system and the target gene encoding Asn679-Phe833 is expressed with a 6His tag at the N-terminus.
Expression system	E.coli
Species	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
Alternative names	Spike glycoprotein,Spike protein
Accession #	QHD43416.1

Specifications

Predicted Molecular Mass	18.98kDa
Actual Molecular Mass	18.98kDa,reducing conditions
Purity	>90% as determined by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.
Endotoxin level	Please contact with the lab for this information
Bioactivity	Testing in progress
Formulation	Supplied as lyophilized from PBS, pH7.5

Preparation and storage

Shipping	In general, proteins are shipped out with blue ice unless customers require otherwise.
Stability &Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 °C for one week . Store at -20 to -80 °C for twelve months from the date of receipt.
Reconstitution	Reconstitute in ddH_2O to a concentration of 0.1-1.0 mg/mL. Do not vortex.

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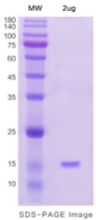
Background

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.

SDS-PAGE image



SDS-PAGE Image

Note

For research use only .Not for use in clinical diagnostic procedures.