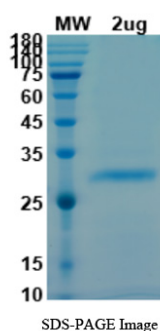


Product Details

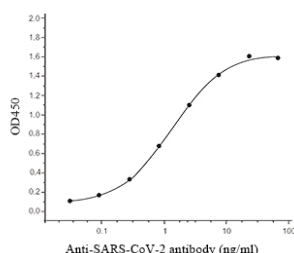
Summary

Catalog#	ATMP02459COV
description	Recombinant SARS-CoV-2 S Protein RBD is produced by Mammalian cells expression system and the target gene encoding Thr333-Pro527 is expressed with C-His Tag
Expression system	Mammalian cells
Species	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
Accession #	YP_009724390.1
Alternative names	2019-nCov RBD Protein,2019-nCoV Spike RBD Protein
Predicted Molecular Mass	23.66kDa
Actual Molecular Mass	30kDa
Purity	>90% as determined by SDS-PAGE
Endotoxin level	Please contact with the lab for this information.
Formulation	Supplied as solution form in PBS, pH7.5/ Supplied as lyophilized from PBS, pH7.5
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	Please refer to the instraction in the hard copy of COA.
Application	Immunogen

SDS-PAGE image



Bioactivity



Recombinant SARS-CoV-2 (2019-nCoV) S Protein RBD (ATMP02459COV) can bind Anti-SARS-CoV-2 antibody (ATMA10157Mo) measured by a functional ELISA assay. The EC50 of Recombinant SARS-CoV-2 (2019-nCoV) S Protein RBD is 2.6 ng/mL.

Background

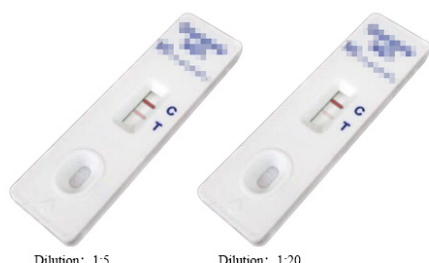
Protein S (PROS1) is glycoprotein and expressed in many cell types supporting its reported involvement in multiple biological processes that include coagulation, apoptosis, cancer development and progression, and the innate immune response. Known receptors bind S1 are ACE2, angiotensin-converting enzyme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

Product performance

Form

Recombinant 2019-nCoV S Protein RBD

Tested Picture



Note

For research use only.