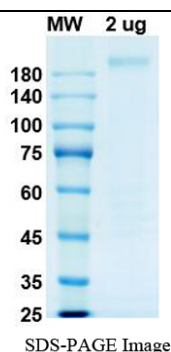


## Product Details

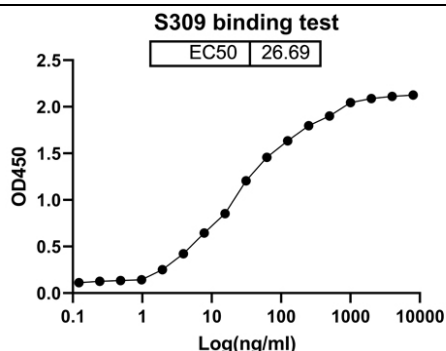
### Summary

<b>Product name</b>	Recombinant 2019-nCoV S -trimer Protein
<b>Catalog#</b>	ATMP02492COV
<b>description</b>	Recombinant SARS-CoV-2 S protein is produced by Mammalian cells expression system and the target gene encoding Met1-Gln1208 is expressed with C-His Tag
<b>Expression system</b>	Mammalian cells
<b>Species</b>	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
<b>Accession #</b>	P0DTC2
<b>Alternative names</b>	Spike glycoprotein, S glycoprotein, E2, Peplomer protein
<b>Predicted Molecular Mass</b>	138.09kDa
<b>Purity</b>	>90% as determined by SDS-PAGE
<b>Endotoxin level</b>	Please contact with the lab for this information
<b>Formulation</b>	Lyophilized. Lyophilized from PBS pH 7.4, 4% Trehalose, 1% Mannitol , 1mM EDTA
<b>Shipping</b>	In general, proteins are shipped out with blue ice unless customers require otherwise.
<b>Stability &amp;Storage</b>	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.
<b>Reconstitution</b>	Reconstitute in sterile water for a stock solution.
<b>Application</b>	Immunogen

### SDS-PAGE image



## Bioactivity



## 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.

## Note

For research use only.