

Recombinant SARS-CoV-2 Spike Protein Fragment 2



Cat. No. bs46108P

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Description

Protein Sequence	Recombinant SARS-CoV-2 S protein fragment 2 is expressed with N-His Tag (Tyr1047-Gln1201).
Source	<i>E. coli</i> Expression System
Accession	QHD43416.1
Mol wt	The protein has a predicted MW of 19.69kDa. The protein migrates to 20KD based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE
Application	Recommended for sandwich immunoassays in ELISA and CLIA. Each laboratory should determine an optimum working titer for use in its particular application.
Activity assay	N/A

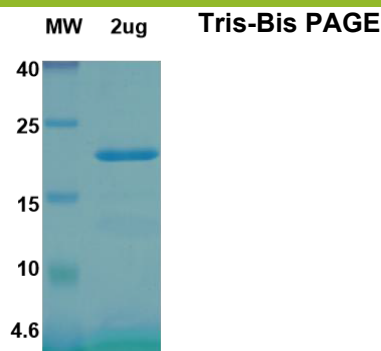
Formulation and Storage

Formulation	Lyophilized from 0.22um filtered solution in PBS (pH 7.4). 5 % trehalose is added as a protectant before lyophilization.
Storage	Store at 2 to 8 °C for one week. Store at -20 to -80 °C for twelve months from the date of receipt. Avoid repeated freeze/thaw cycles.

Background

Protein S (PROS1) is a 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 binding to 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 SARS-CoV-2 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 membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Assay Data



[Recombinant SARS-CoV-2 Spike protein fragment 2 on Tris-Bis PAGE under reduced condition. The purity is](#)

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