

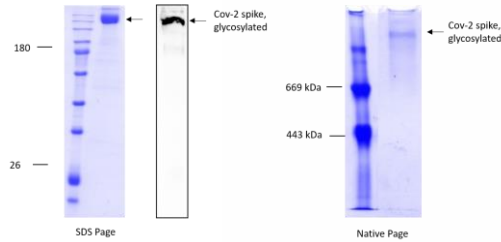
Datasheet

Trimeric SARS CoV-2 Spike Antigen, Full-length

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|-----------------------|--|---------------|---------------|------------------|
| Catalogue No: | BSV-COV-PR-32 | BSV-COV-PR-33 | BSV-COV-PR-34 | BSV-COV-PR-35 |
| Pack Size | 25 µg | 100 µg | 1 mg | >1mg, bulk sizes |
| Product Name: | Trimeric SARS CoV-2 Spike Antigen, Full-length | | | |
| Description: | Full length SARS-CoV-2 Spike Protein is single span transmembrane protein which contains the Spike protein amino acids 1-1273. Full length SARS-CoV-2 Spike Protein is manufactured in HEK293 mammalian cells, ensuring the most authentic post-translational modifications. | | | |
| Species: | 2019-nCoV, COVID-19 | | | |
| Sequence: | Full-length sequence (aa 1 – 1273), furin cleavage site “RRAR” mutated to “GSAG”; C-terminal Rho1D4 tag fused with spacer “GSSG” to protein sequence | | | |
| Accession No.: | YP_009724390.1 (GenBank), P0DTC2 (UniProt). | | | |
| Tag: | C-terminal Rho1D4 tag for affinity purification | | | |
| Host: | Expressed in HEK293 Expi cells | | | |
| Applications: | ELISA assays, Ligand binding assays (e.g. SPR), Biochemical and Biophysical analyses | | | |
| Purity: | >98% by SDS-PAGE gel | | | |

1,286 amino acids (including Rho1D4 tag and linker) 142.114 kDa.
Size, purity and oligomerization state of CoV-2 spike protein assessed by SDS-PAGE, Western Blot using a Rho1D4 antibody and Native-PAGE. Native PAGE shows no aggregation.

Predicted Molecular Mass:



Formulation:

Liquid – Purified protein (1 mg/ml) supplied in 20 mM Hepes pH 7.5; 150 mM NaCl, 0.001 % LMNG

Endotoxin:

Endotoxin level is < 0.1 ng/μg of protein (<1 EU/μg)

Shipping, Storage and Stability:

The product is shipped with dry ice. Upon receipt, unopened vial can be stored at -80°C for over 12 months. Avoid repeated freeze/thaw cycles.

Background:

Coronavirus enters the host cell mediated by the transmembrane spike glycoprotein binding to the host ACE2 protein. This spike (S) protein is comprised of homotrimers with two functional subunits (S1 and S2). The trimeric protein also contains an S2' site which is cleaved by host proteases just upstream of the fusion peptide, activating membrane fusion. The structure of the SARS-CoV-2 protein has been solved and shown to bind very tightly to the human ACE2 protein. Further investigation of the relationship between this viral and host protein will provide insight into therapeutic and diagnostic development for COVID-19.

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