

Synonym

Spike,S2 protein,Spike glycoprotein Subunit2,S glycoprotein Subunit2,Spike protein S2,COVID-19

Source

SARS-CoV-2 S2 protein, His Tag (S2N-C52H2) is expressed from human 293 cells (HEK293).

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 60.0 kDa. The protein migrates as 70-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Delivered as bulk protein in a $0.2~\mu m$ filtered solution of 20~mM PB, 300~mM NaCl, pH7.4 with glycerol as protectant.

Contact us for customized product form or formulation.

Storage

Please avoid repeated freeze-thaw cycles.

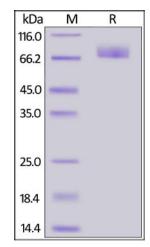
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

Shipping

This product is supplied as sterile liquid solution and shipped frozen with dry ice, please inquire the shipping cost.

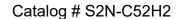
SDS-PAGE



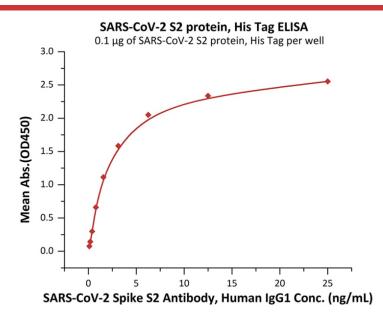
SARS-CoV-2 S2 protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

SARS-CoV-2 (COVID-19) S2 protein, His Tag







Immobilized SARS-CoV-2 S2 protein, His Tag (Cat. No. $\underline{S2N-C52H2}$) at 1 $\mu g/mL$ (100 $\mu L/well$) can bind SARS-CoV-2 Spike S2 Antibody, Human IgG1 with a linear range of 0.1-3 ng/mL (QC tested).

Background

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 the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

References

- (1) Wan Y, et al. J Virol. 2020. pii: JVI.00127-20.
- (2) Benvenuto D, et al. J Med Virol. 2020.
- (3) Chang CY, et al. AMB Express. 2020. 10(1):20.

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.