

COVID 19 Spike S1 Coronavirus Active Protein | COVID-19 active protein

SARS-CoV-2 (2019-nCoV) Spike Protein (S1 Subunit, His tag)

CATALOG #
AAA268895

HOST
Baculovirus-Insect CellsSource: 2019nCoV

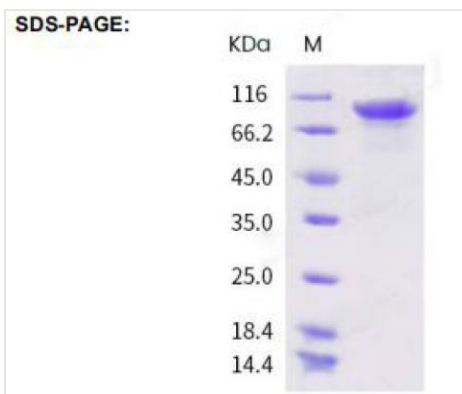
PRODUCT SYNONYMS

COVID 19 Spike S1 Coronavirus; SARS-CoV-2 (2019-nCoV) Spike Protein (S1 Subunit; His tag); 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike S1; COVID-19 active protein

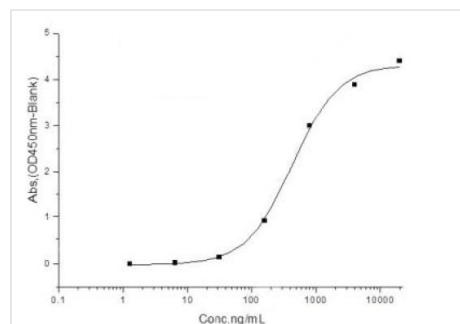
PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells Source: 2019nCoV
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Liquid or lyophilized from sterile 20 mM Tris, 300 mM NaCl, 10 % glycerol, pH 7.5. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. SARS-CoV-2 (2019-nCoV) Spike Protein (S1Subunit, His tag)E27D2019-P9
Predicted N terminal	Val 16
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized human ACE2 protein (Fctag) at 10ug/mL (100uL/well) can bind 2019-nCoV Spike Protein (S1, His tag) (ZD2019-P9), the EC50of 2019-nCoV Spike Protein (S1, His tag) (ZD2019-P9) is 300-600 ng/mL.
Protein Construction	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (S1Subunit) (YP_009724390.1) (Val16-Arg685) was expressed with a polyhistidine tag at the C-terminus
Molecular Mass	The recombinant SARS-CoV-2 (2019-nCoV) Spike Protein (S1 Subunit, His tag)consists of 681 amino acids and predicts a molecular mass of 76.45 kDa
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Samples are stable for twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C upon receiving. Recommend to aliquot the protein intosmaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for COVID-19 active protein	Description: The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. 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. It's been reported that 2019-nCoV can infect the human respiratory epithelial cell 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	References: 11. Shen S, et al. (2007) Expression, glycosylation, and modification of the spike (S) glycoprotein of SARS CoV. <i>Methods Mol Biol.</i> 379: 127-35. 2. Du L, et al. (2009) The spike protein of SARS-CoV--a target for vaccine and therapeutic development. <i>Nat Rev Microbiol.</i> 7 (3): 226-36. 3. Xiao X, et al. (2004) The SARS-CoV S glycoprotein. <i>Cell Mol Life Sci.</i> 61 (19-20): 2428-30

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/baculovirus-insect-cells-covid-19-active-protein/covid-19-spike-s1-coronavirus/268895>