

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

SARS-CoV-2 Spike S1 protein

CATALOG #
AAA60537

HOST
HEK293 Cell

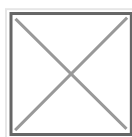
PRODUCT SYNONYMS

COVID 19 Spike S1 Coronavirus; SARS-CoV-2 Spike S1 protein; 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

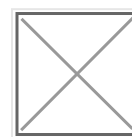
PRODUCT SPECIFICATIONS

Host	HEK293 Cell
Purity/Purification	>95%
Form/Format	The recombinant protein is lyophilized in PBS, PH7.4. Add appropriate volume of PBS into the tube and let the pellet dissolve completely. For example, adding 100 ul of PBS to make a final concentration of 1 mg/ml. The concentration of the protein was determined by a BCA protein assay prior to lyophilization.
Tag Information	His at C-terminus
Endotoxin	<5 EU/mg, determined by the LAL method
Bioactivity	Strong binding ability with human ACE2 protein and binding capacity to a human anti-S1 monoclonal antibody (determined by ELISA).
Antigenicity	Antigenicity validated in covid positive samples via ELISA test by coating SARS-CoV-2 S1 as capture antigen.
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	Lyophilized from sterile PBS, pH 7.4. Lyophilized protein can be stored at 2°C to 8°C for short-term (<1 week), and at -20°C to -80° for long term. For reconstitution, add 100 ul of deionized water, mix gently and incubate the reconstituted product for 10 minutes at room temperature prior to use, Reconstituted protein, if not being used immediately, should be aliquoted and kept at -20°C to 80°C Avoid repeated freeze-thaw cycles.

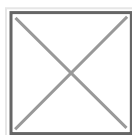
IMAGES



Application Data



Application Data



SDS-PAGE

The recombinant SARS-CoV-2 Spike S1 Protein (YP_009724390.1) (Val16-Arg685) with C-terminal His-tag consists of 681 amino acids. Its predicted molecular mass of 77 kDa. The apparent molecular mass of S1 in SDS-PAGE is around 120 kDa, probably due to glycosylation.

ADDITIONAL INFORMATION

Related Product Information for COVID-19 active protein	The spike (S) glycoprotein of SARS-CoV-2, which is highly exposed on the viral surface, plays a major role in inducing neutralizing antibody, T cell responses and protective immunity. The S protein contains two subunits: S1 and S2 cleaved by furin in host cells. S1 mediates the interaction of SARS-CoV-2 to the host cell receptor (ACE2) through its receptor-binding domain and is the target of vaccine development.
References	1. Shajahan A, et al. (2020) Deducing the N- and O-glycosylation profile of the spike protein of novel coronavirus SARS-CoV-2. bioRxiv, https://doi.org/10.1101/2020.04.01.020966. 2. Walls, A C, et al. (2020) Structure, Function, and Antigenicity of the SARS-CoV-2 Spike Glycoprotein. Cell, 181(2), 281-292.e6. https://doi.org/10.1016/j.cell.2020.02.058.

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/hek293-cell-covid-19-active-protein/covid-19-spike-s1-coronavirus/60537>