

COVID 19 Spike S2 (ECD) Coronavirus Recombinant Protein | COVID-19 recombinant protein

Recombinant 2019-nCoV Spike S2 Protein (ECD, Fc Tag)

CATALOG # AAA177013	HOST HEK293 Cells
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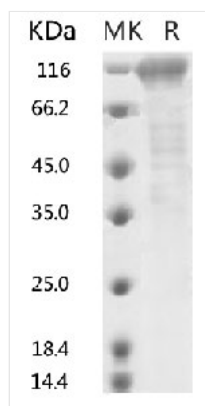
PRODUCT SYNONYMS

COVID 19 Spike S2 (ECD) Coronavirus; Recombinant 2019-nCoV Spike S2 Protein (ECD; Fc 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 S2 (ECD); COVID-19 recombinant protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by reducing SDS-PAGE.
Form/Format	Lyophilized from sterile PBS, pH 7.4, 5% trehalose, 5% mannitol, 0.01% tween-80.
Sequence	Ser686-Pro 1213
Species	2019-nCoV
Tag	C-Fc
Endotoxin	<1.0 EU per ug as determined by the LAL method.
Protein Construction	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (S2 ECD) (YP_009724390.1) (Ser686-Pro1213) was expressed with the Fc region of human IgG1 at the C-terminus.
Reconstitution	It is recommended that the vial be centrifuged prior to opening to bring the contents to the bottom. Do not mix by vortex. It is also recommended that sterile water be added to the vial to prepare a stock solution of 0.25 mg/ml. Concentration is measure by UV-Vis.
Preparation and Storage	Lyophilized proteins are stable for up to 12 months when stored at -20°C to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for COVID-19 recombinant protein	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 SARS-CoV-2 (COVID-19 coronavirus, 2019-nCoV) 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. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.
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NCBI AND UNIPROT INFORMATION

Molecular Weight	84.66 kDa
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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/covid-19-spike-s2-ecd-coronavirus-recombinant-protein-hek293-cells/177013>