

MERS-CoV Spike Protein Active Protein | MERS-CoV active protein

Recombinant MERS-CoV Spike Protein (S1+S2 ECD, aa 1-1297, His Tag)

CATALOG # AAA177989	HOST Baculovirus-Insect Cells
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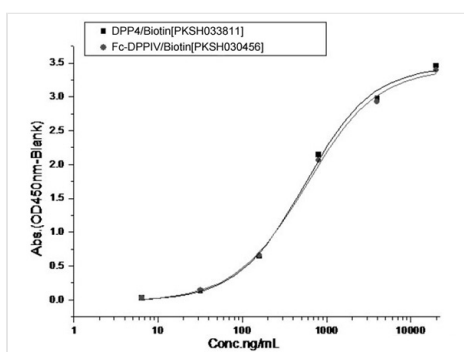
PRODUCT SYNONYMS

MERS-CoV Spike Protein; Recombinant MERS-CoV Spike Protein (S1+S2 ECD; aa 1-1297; His Tag); coronavirus s1 Protein; MERS-CoV; coronavirus s2 Protein; coronavirus spike Protein; cov spike Protein; ncov RBD Protein; ncov s1 Protein; ncov s2 Protein; ncov spike Protein; RBD Protein; S Protein; s1 Protein; Spike RBD Protein; MERS-CoV active protein

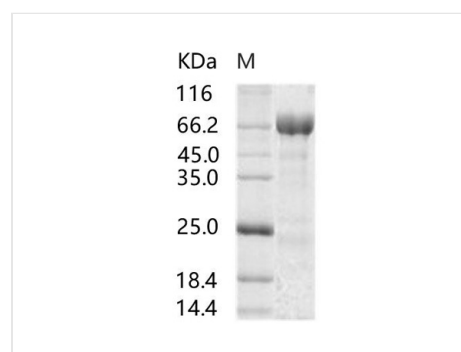
PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	>85% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH7.4, 10% glycerol. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Sequence	Met1-Trp12 97
Species	MERS-CoV
Tag	C-His
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Protein Construction	A DNA sequence encoding the extracellular domain of spike protein MERS-CoV (AFS88936.1)(Met1-Trp1297) was fused with a polyhistidine tag at the C-terminus.
Activity	Measured by its binding ability in a functional ELISA.1.Recombinant MERS-CoV Spike Protein (S1+S2 ECD, aa 1-1297, His Tag)(Cat: PKSV030236) at 10 ug/mL (100ul/well) can bind biotinylated DPP4 (Cat: PKSH033811), The EC50 of can biotinylated DPP4 (Cat: PKSH033811) is 0.02-0.04 ug/mL.2.Recombinant MERS-CoV Spike Protein (S1+S2 ECD, aa 1-1297, His Tag)(Cat: PKSV030236) at 10 ug/mL (100ul/well) can bind biotinylated Fc-DPP4 (Cat: PKSH030456), The EC50 of can biotinylated Fc-DPP4 (Cat: PKSH030456) is 0.01-0.02 ug/mL.
Preparation and Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 degree C. Reconstituted protein solution can be stored at 4-8 degree C for 2-7 days. Aliquots of reconstituted samples are stable at < -20 degree C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs.

IMAGES



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SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for MERS-CoV active 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.
Product Categories/Family for MERS-CoV active protein	Virus related Protein

NCBI AND UNIPROT INFORMATION

Molecular Weight	Mol. Mass: 142.52kDa
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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://www.aaabiotech.com/baculovirus-active-protein/mers-cov-spike-protein/177989>