

MERS-CoV Spike Active Protein | RBD active protein

Recombinant MERS-CoV Spike RBD protein

CATALOG # AAA48981	HOST Baculovirus	APPLICATIONS SDS-Page
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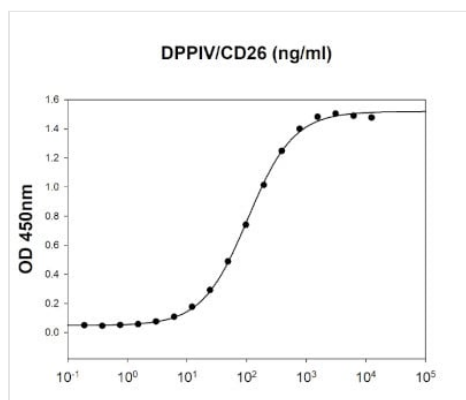
PRODUCT SYNONYMS

MERS-CoV Spike; Recombinant MERS-CoV Spike RBD protein; Middle East respiratory syndrome coronavirus; Human betacoronavirus 2c EMC/2012; MERS-CoV; MERS; MERS-CoV RBD; MERS RBD; receptor binding domain; RBD; Spike RBD protein; RBD active protein

PRODUCT SPECIFICATIONS

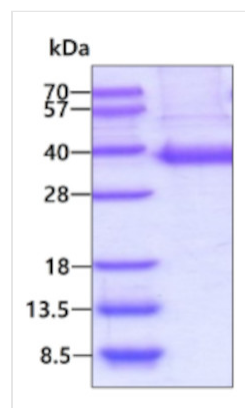
Host	Baculovirus
Purity/Purification	> 90% by SDS-PAGE
Form/Format	Liquid In. Phosphate-Buffered Saline (pH7.4) containing 10% glycerol
Concentration	0.5 mg/ml (determined by Absorbance at 280nm) (varies by lot)
Sequence Positions	358-606aa
Sequence	Ala SGVYSVSS FEAKPSGSVV EQAEGVECDF SPLLSGTPPQ VYNFKRLVFT NCNYNLTKLL SLFSVNDFTC SQISPAAIAS NCYSSLILDY FSYPLSMKSD LSVSSAGPIS QFNYKQSFSN PTCLILATVP HNLTTITKPL KYSYINKCSR LLSDDRTEVP QLVNANQYSP CVSIVPSTVW EDGDYYRKQL SPLEGGGWLV ASGSTVAMTE QLQMFGGITV QYGTDTNSVC PKLEFANDTK IASQLGNCVE Y
Applicable Applications for RBD active protein	Bioactivity, SDS-PAGE
Species	MERS-CoV
Endotoxin	< 1 EU per 1ug of protein (determined by LAL method)
Tag	His-Tag
Preparation and Storage	Can be stored at 2-8 degree C short term. For long term storage, aliquot and store at -20 to -80 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



Bioactivity

MERS-CoV Spike RBD is coated at 2 ug/ml (100 ul/well) can bind human DPPIV/CD26 in a functional ELISA assay.



SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

ADDITIONAL INFORMATION

Related Product Information for RBD active protein	MERS-CoV, which causes the Middles East Respiratory Syndrome (MERS), belongs to a family of viruses known as coronaviruses. MERS-CoV was first identified in the Kingdom of Saudi Arabia in 2012, which is a single and positive stranded RNA virus. Dromedary camels are widely considered as the source of the transmission of MERS-CoV. The rate of human transmission among household contacts of MERS patients has been approximately 5 % based on serological analysis. MERS-CoV has four structural proteins, known as the S (spike), E (envelope), M (membrane), and N (nucleocapsid) proteins. The spike protein, responsible for allowing the virus to attach to and fuse with the membrane of a host cell and 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. MERS-CoV S mediates viral attachment and fusion to human cells via human cellular receptor DPP4, also known as CD26. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. Recombinant MERS-CoV Spike RBD, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.
Product Categories/Family for RBD active protein	Virus; Proteins
References	Junghyun Goo., et al. (2020) Virus Res. 278:197863. Yan-Hua Li., et al. (2019) Engineering. 5:940-947. Lingshu Wang., et al. (2018) J Virol. 92:e02002-2017. Nicolas Papageorgiou., et al. (2016) Acta Crystallogr D Struct Biol. 72:192-202. Xiao-Yan Che., et al. (2004) J Clin Microbiol. 42:2629-2635. Goo J, et al. Characterization of novel monoclonal antibodies against MERS-coronavirus spike protein. (Virus Res. 2020){ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7114870/ }

NCBI AND UNIPROT INFORMATION

UniProt Accession #	K0BRG7
Molecular Weight	28.2kDa (258aa)

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-rbd-active-protein/mers-cov-spike/48981>