

Mouse MERS-CoV Spike S2 Subunit Monoclonal Antibody | anti-MERS-CoV antibody

MERS-CoV Spike S2 Subunit antibody

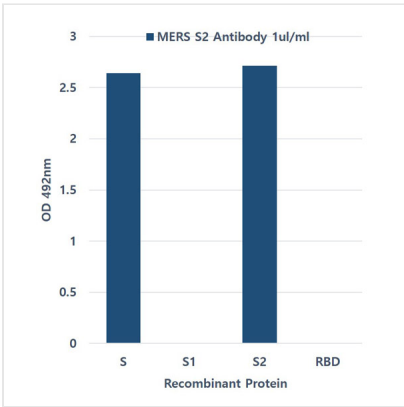
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA48360	Mouse	MERS-CoV	Western Blot, ELISA

PRODUCT SYNONYMS

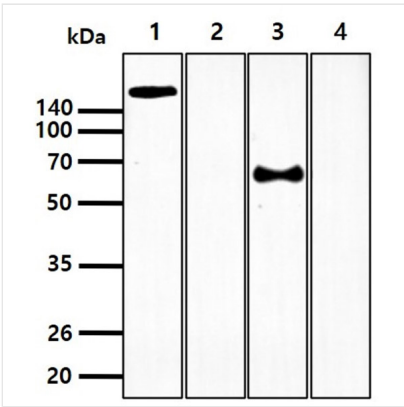
MERS-CoV Spike S2 Subunit; Monoclonal Antibody; MERS-CoV Spike S2 Subunit antibody; Middle East respiratory syndrome coronavirus; Human betacoronavirus 2c EMC/2012; MERS-CoV; MERS; MERS-CoV S2 P; Spike2 glycoprotein; S2 glycoprotein; S2; Spike S2 Subunit protein; S2 Subunit; anti-MERS-CoV antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	MERS-CoV
Clonality	Monoclonal
Isotype	IgG2b kappa
Clone Number	AT14H8
Purity/Purification	By protein-A affinity chromatography
Form/Format	Liquid. In Phosphate-Buffered Saline (pH7.4) with 0.02% Sodium Azide, 10% glycerol
Concentration	1mg/ml (determined by BCA assay) (varies by lot)
Applicable Applications for anti-MERS-CoV antibody	WB (Western Blot), ELISA
Immunogen	Recombinant MERS-CoV Spike S2 Subunit (752-1296aa) purified from Baculovirus
Conjugation	Unconjugated
Preparation and Storage	Can be stored at +2C to +8 degree C for 1 week. For long term storage, aliquot and store at -20C to -80 degree C. Avoid repeated freezing and thawing cycles.



ELISA
ELISA: MERS Spike S2 Antibody (1ug/ml) specifically recognizes MERS Spike and Spike S2 recombinant protein, but not interacted MERS Spike S1 and RBD recombinant protein in ELISA.



WB (Western Blot)
The recombinant proteins (50ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-MERS Spike S2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: Recombinant MERS Spike protein (ATGP3979) Lane 2.: Recombinant MERS Spike S1 protein (ATGP3980) Lane 3.: Recombinant MERS Spike S2 protein (ATGP3981) Lane 4.: Recombinant MERS Spike RBD protein (ATGP3982)

ADDITIONAL INFORMATION

Related Product Information for anti-MERS-CoV antibody	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.
Product Categories/Family for anti-MERS-CoV antibody	Virus; Antibodies
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 Mar;278:197863.{https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7114870/} S2-14H8 mAb, which showed binding affinity to S2, showed partial neutralizing effect. (Virus Res. 2020 Mar 278:197863)

NCBI AND UNIPROT INFORMATION

UniProt Accession #	K0BRG7
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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.