abcam

ab326881

Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody [EPR31043-570]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR31043-570
Purification technique	Affinity purification Protein A
Specificity	This antibody detects transfected levels of Bat coronavirus Spike protein S1 and the immunogen used targets the RBD domain.
Concentration	0.479 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Pipistrellus bat coronavirus HKU5

Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Pipistrellus bat coronavirus HKU5
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ICC/IF

Tested

Species	Pipistrellus bat coronavirus HKU5
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Pipistrellus bat coronavirus HKU5
Dilution info	1/5000
Notes	-

Target data

See full target information S

Function Spike protein S1. Attaches the virion to the cell membrane by interacting with host receptor, initiating the infection. Spike protein S2. Mediates fusion of the virion and cellular membranes by acting as a class I viral fusion protein. Under the current model, the protein has at least three conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target

cell membranes. Spike protein S2'. Acts as a viral fusion peptide which is unmasked following S2 cleavage occurring upon virus endocytosis.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

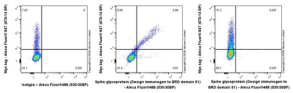
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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4 product images



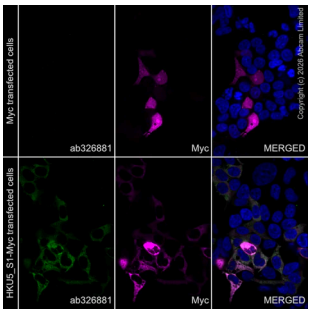
Flow Cytometry (Intracellular) - Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody [EPR31043-570] (ab326881)

Bat coronavirus HKU5 Spike protein S1 (RBD domain) Flow Cytometry (Intracellular) staining using rabbit Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HEK-293T (human epithelial cell line from embryonic kidney) transfected with a Bat coronavirus Spike protein S1 expression vector containing a His-Myc tag® (Middle) and 293T cells transfected with an empty expression vector containing a His-Myc tag® (Right) cells labelling with ab326881 at 1/5000 dilution (0.01ug) / Middle and Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Cells were co-stained with Myc tag conjugated to Alexa Fluor®647.



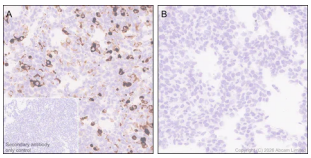
Immunocytochemistry/ Immunofluorescence - Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody [EPR31043-570] (ab326881)

Bat coronavirus HKU5 Spike protein S1 (RBD domain) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HEK-293T cells transfected with an empty expression vector containing a myc-His-tag® and HEK-293T (human epithelial cell line from embryonic kidney) transfected with a Bat coronavirus Spike protein S1 expression vector containing a His-Myc tag cells , labelling with ab326881 at 1/1000 (0.479 µg/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing positive staining in HEK-293T transfected with a Bat coronavirus Spike protein S1 expression vector containing a His-Myc tag(shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab223894 Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/100 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody [EPR31043-570] (ab326881)

Bat coronavirus HKU5 Spike protein S1 (RBD domain) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody

Immunohistochemical analysis of paraffin-embedded
(A) HEK-293T (human epithelial cell line from embryonic kidney) transfected with a Bat coronavirus Spike protein S1 expression vector containing a His-Myc tag
(B) HEK-293T transfected with empty vector containing a His-Myc tag
labeling with ab326881 at 1/500 (0.958 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

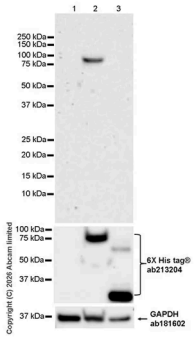
Positive on (A) HEK-293T transfected with a Bat coronavirus Spike protein S1 expression vector containing a His-Myc tag, no staining on (B) HEK-293T transfected with empty vector containing a His-Myc tag. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Western blot - Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody [EPR31043-570] (ab326881)

Bat coronavirus HKU5 Spike protein S1 (RBD domain) Western blot staining using rabbit Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

This antibody does not cross-react with overexpressed MERS-CoV Spike protein S1 by western blot.

This antibody detects transfected levels of Bat coronavirus Spike protein S1 only and the immunogen used targets the RBD domain.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa); Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) (1:5000)(81KDa).

All lanes:
Western blot - Anti-Bat coronavirus HKU5 Spike protein S1 (RBD domain) antibody [EPR31043-570] (ab326881) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell) cells transfected with an empty vector containing a myc-His-tag® whole cell lysate at 20 µg

Lane 2:
293T cells transfected with a Bat coronavirus Spike protein S1 expression vector containing a myc-His-tag® whole cell lysate at 40 µg

Lane 3:
293T cells transfected with a MERS-CoV Spike protein S1 expression vector containing a myc-His-tag® whole cell lysate at 5 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 81 kDa, 36 kDa

Exposure time: 180s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.