abcam

ab236632

Anti-HA tag antibody [EPR22819-101]

Anti-HA tag antibody [EPR22819-101] (ab236632) is a rabbit monoclonal antibody detecting HA tag in Western Blot, Flow Cytometry (Intra), IP, ICC/IF.

- Biophysical QC for unrivalled batch-batch consistency
- Optimized for sensitivity and reproducibility across assays
- Over 20 publications

Lab Essentials | 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	EPR22819-101
Purification technique	Affinity purification Protein A
Concentration	0.62 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ChIP

Not recommended

Species	Tag

Dilution info	-
Notes	-

IP

Tested

Species	Tag
Dilution info	1/30
Notes	-

WB

Tested

Species	Tag
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Tag
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Tag
Dilution info	1/600
Notes	-

IHC-P

Tested

Species	Tag
Dilution info	-
Notes	-

Target data

See full target information HA

Function	Binds to sialic acid-containing receptors on the cell surface, bringing about the attachment of the virus particle to the cell. This attachment induces virion internalization of about two third of the virus particles through clathrin-dependent endocytosis and about one third through a clathrin- and caveolin-independent pathway. Plays a major role in the determination of host range restriction and virulence. Class I viral fusion protein. Responsible for penetration of the virus into the cell cytoplasm by mediating the fusion of the membrane of the endocytosed virus particle with the endosomal membrane. Low pH in endosomes induces an irreversible conformational change in HA2, releasing the fusion hydrophobic peptide. Several trimers are required to form a competent fusion pore. Binds to sialic acid-containing receptors on the cell surface, bringing about the attachment of the virus particle to the cell. This attachment induces virion internalization either through clathrin-dependent endocytosis or through clathrin- and caveolin-independent pathway. Plays a major role in the determination of host range restriction and virulence. Class I viral fusion protein. Responsible for penetration of the virus into the cell cytoplasm by mediating the fusion of the membrane of the endocytosed virus particle with the endosomal membrane. Low pH in endosomes induces an irreversible conformational change in HA2, releasing the fusion hydrophobic peptide. Several trimers are required to form a competent fusion pore.

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

Product Specifications
Anti-HA tag antibody [EPR22819-101] (ab236632) is a rabbit recombinant monoclonal antibody and is validated for use in Flow Cyt (Intra), ICC/IF, IHC, IP, WB.
HA tag antibodies are used to visualize proteins labelled with this tag in a variety of applications (for example imaging and Flow cytometry). To enable specific detection of your tagged protein, Anti-HA tag antibody [EPR22819-101] (ab236632) has been validated in Flow Cyt (Intra), ICC/IF, IHC, IP, WB
Anti-HA tag antibody [EPR22819-101] (ab236632) specifically detects HA tag (UniProt ID: P03437; Molecular weight: 62kDa) and is sold in 100 µL and 1 mL selling sizes.

Related Products
Conjugation-ready, carrier free format available for antibody clone EPR22819-101 - ab256483.
Antibody clone EPR22819-101 is also available pre-conjugated to a variety of labels for your convenience - Alexa Fluor® 647, PE, Alexa Fluor® 488, FITC (ab288325, ab303586, ab305269, ab316174).

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

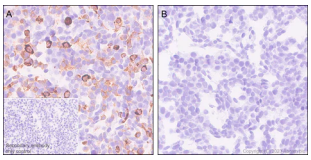
We do not recommend this combination. It is not covered by our product promise.

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.

10 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HA tag antibody [EPR22819-101] (ab236632)

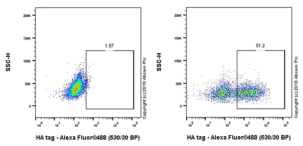
Immunohistochemical analysis of paraffin-embedded (A) HEK-293T (human embryonic kidney epithelial cell) transfected with a HA Tag expression vector, (B) HEK-293T transfected with empty vector labelling HA tag with ab236632 at 1/5000 (0.124 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on HEK-293T transfected with a HA Tag expression vector (Image A) and no staining on (B) HEK-293T transfected with empty vector (Image B)
The section was incubated with ab236632 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).

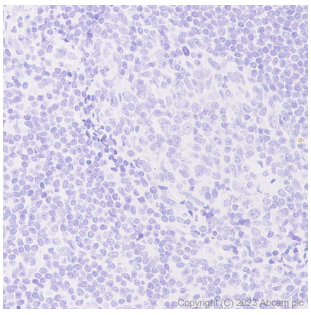
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Flow Cytometry (Intracellular) staining using rabbit Anti-HA tag antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HEK-293T (human embryonic kidney) transfected with TATA-box-binding protein (WT) expression vector containing HA-tag (Right) / HEK-293T (Left) cells labeling HA tag with ab236632 at 1/600 dilution. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human tonsil using rabbit Anti-HA tag antibody

Immunohistochemical analysis of paraffin-embedded human tonsil with ab236632 at 1/5000 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

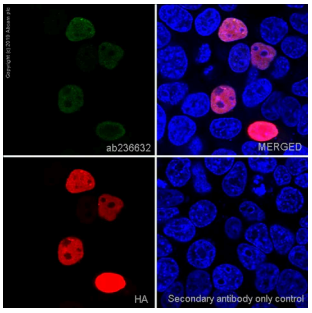
Negative control: No staining on human tonsil.

The section was incubated with ab236632 for 30 mins at room temperature.

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

Counterstained with Hematoxylin.

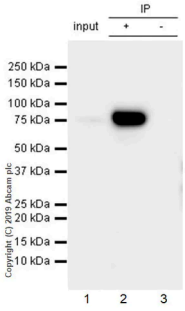
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HA tag antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293T (human embryonic kidney epithelial cell) transfected with HA-tagged TATA-box-binding protein (WT) expression vector labeling HA tag with ab236632 at 1/1000 (0.6 µg/ml) dilution, followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000, (2 µg/ml) dilution (Green). Confocal image showing nuclear staining in HEK-293T cells transfected with HA-tagged TATA-box-binding protein (WT) expression vector is observed. Anti-HA.11 Epitope Tag antibody (Alexa Fluor® 647) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.



Immunoprecipitation - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag was immunoprecipitated from 0.35 mg HEK-293T (human embryonic kidney) transfected with TIM 4 (WT) expression vector containing a HA-GFP-tag and PDGFR TM domain whole cell lysate 10µg with ab236632 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab236632. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/2000 dilution.
Lane 1: HEK-293T (human embryonic kidney) transfected with TIM 4 (WT) expression vector containing a HA-GFP-tag and PDGFR TM domain whole cell lysate 10µg.

Lane 2: ab236632 IP in HEK-293T transfected with TIM 4 (WT) expression vector containing a HA-GFP-tag and PDGFR TM domain whole cell lysate.

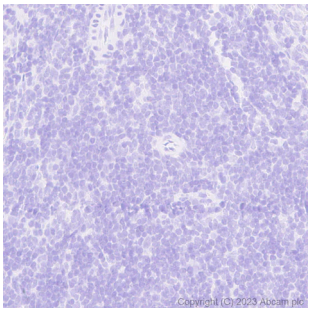
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab236632 in HEK-293T transfected with TIM 4 (WT) expression vector containing a HA-GFP-tag and PDGFR TM domain whole cell lysate.

Blocking and dilution buffer and concentration/ 5% NFDM/TBST.

Exposure time: 3 seconds.

All lanes:
Immunoprecipitation - Anti-HA tag antibody [EPR22819-101] (ab236632)

Predicted band size: 64 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat spleen using rabbit Anti-HA tag antibody

Immunohistochemical analysis of paraffin-embedded Rat spleen with ab236632 at 1/5000 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

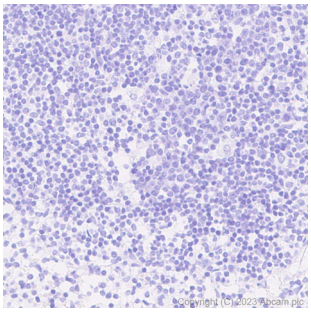
Negative control: No staining on Rat spleen.

The section was incubated with ab236632 for 30 mins at room temperature.

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

Counterstained with Hematoxylin.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse spleen using rabbit Anti-HA tag antibody

Immunohistochemical analysis of paraffin-embedded Mouse spleen with ab236632 at 1/5000 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

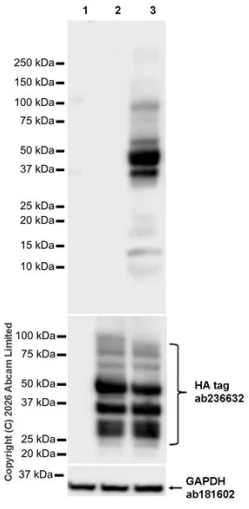
Negative control: No staining on Mouse spleen.

The section was incubated with ab236632 for 30 mins at room temperature.

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

Counterstained with Hematoxylin.

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



Western blot - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Western blot staining using rabbit Anti-HA tag antibody

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

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab236632) (1:200000) (36KDa);Anti-HA tag® antibody- (ab236632) (1:1000)(30-100KDa).

All lanes:
Western blot - Anti-NPM1-mutated antibody [EPR30901-1] (ab326567) at 1/1000 dilution

Lane 1:
293T cells transfected with an empty vector containing a Myc-HA-tag, whole cell lysate at 20 µg

Lane 2:
293T cells transfected with a human wild-type NPM1 expression vector containing a Myc-HA-tag, whole cell lysate at 20 µg

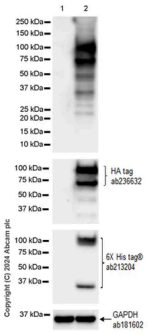
Lane 3:
293T cells transfected with a human NPM1(mutation) expression vector containing a Myc-HA-tag, whole cell lysate at 20 µg

Secondary

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

Observed band size: 30-100 kDa, 36 kDa

Exposure time: 3s



Western blot - Anti-HA tag antibody [EPR22819-101] (ab236632)

HA tag Western blot staining using rabbit Anti-HA tag antibody

Rfx Cas13d may cleave to two fragments close to C-term, and this antibody can recognize the full length and N-terminal fragment. HA tag antibody can recognize the full length and N-terminal fragment. His-tag antibody can recognize full length and C-terminal fragment because the His-tag of this overexpression vector located on C-term, HA-myc-tag of this overexpression vector located on N-term.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

In Western blot, Anti-HA tag antibody [EPR22819-101] - (ab236632) staining at 1/1000 dilution.

In Western blot, Anti-6XHis tag® antibody [EPR20547] - ChIP Grade (ab213204) staining at 1/5000 dilution.

All lanes:
Western blot - Anti-Rfx Cas13d (N-term) antibody [EPR23965-31] (ab314741) 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 10 µg

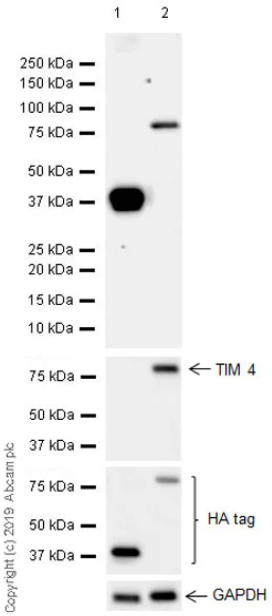
Lane 2:
293T cells transfected with a Ruminococcus flavefaciens cas13d expression vector containing a HA-myc-tag (N-term) and a His-tag® (C-term), whole cell lysate at 10 µg

Secondary

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

Observed band size: 110 kDa, 70 kDa, 36 kDa, 40 kDa

Exposure time: 6s



Western blot - Anti-HA tag antibody [EPR22819-101] (ab236632)

Antibodies used in the control panels are (Anti-TIM 4 antibody), ab9110 (Anti-HA tag antibody - ChIP Grade) and ab181602 (Anti-GAPDH antibody [EPR16891] - Loading Control).
Exposure time: 3 minutes.

Blocking and Diluting Buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-HA tag antibody [EPR22819-101] (ab236632) at 1/1000 dilution

Lane 1:
HEK-293T (human embryonic kidney) transfected with an empty vector (vector control), containing a HA-myc-His-GFP-tag and PDGFR TM domain, whole cell lysate at 10 µg

Lane 2:
HEK-293T transfected with TIM 4 (WT) expression vector containing a HA-myc-His-GFP-tag and PDGFR TM domain, whole cell lysate at 10 µg

Secondary

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

Predicted band size: 64 kDa

Observed band size: 37 kDa, 78 kDa

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