abcam

ab232589

Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free

Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589) is a rabbit recombinant monoclonal antibody provided in a PBS only buffer for easy conjugation. Suitable for **Western Blot, Flow Cytometry (Intra), IHC-P, IHC-Fr, ICC/IF** in **Human, Mouse, Rat**.

- BSA, sodium azide, and glycerol-free for easy conjugation
- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR15581-54
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Expected

Species	Mouse, Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Rat
Dilution info	-
Notes	Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20)

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information TOMM20

Function	Central receptor component of the translocase of the outer membrane of mitochondria (TOM) complex essential for the recognition and translocation of cytosolically synthesized mitochondrial preproteins (PubMed:40080546). Together with TOMM22 functions as the transit peptide receptor at the surface of the mitochondrion outer membrane and facilitates the movement of preproteins into the TOM40 translocation pore (PubMed:18331822). The TOM complex associates with the ion channel VDAC2 and PINK1 kinase at depolarized mitochondria, this interaction stabilizes PINK1 at the outer mitochondrial membrane and triggers downstream mitophagy by the recruitment of the E3 ubiquitin ligase PRKN (PubMed:40080546). Required for the translocation across the mitochondrial outer membrane of cytochrome P450 monooxygenases (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

What is this antibody validated in?
Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rat samples.

What is the molecular weight of TOMM20?
Anti-TOMM20 [EPR15581-54] - BSA and Azide free (ab232589) specifically detects a band for TOMM20 (UniProt: Q15388) at a molecular weight of 16kDa.

Other related products
We have a range of other formats of antibody clone [EPR15581-54] also available for your convenience: ab186735, Alexa Fluor® 647 - ab209606, HRP - ab209951, Alexa Fluor® 405 - ab210047, Alexa Fluor® 594 - ab210665, Alexa Fluor® 568 - ab210841, Alexa Fluor® 555 - ab221292, APC - ab225341, PE - ab225342, Carrier free - ab232589, Alexa Fluor® 488 - ab320072

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

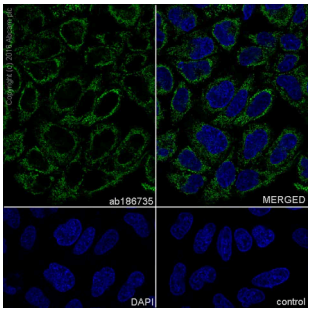
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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8 product images

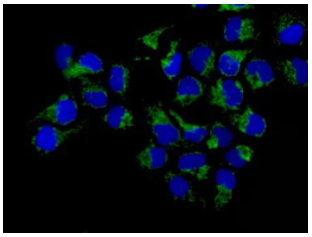


Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TOMM20 antibody

ab186735 staining TOMM20 in HeLa (human epithelial cell line from cervix adenocarcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000. DAPI was used as a nuclear counterstain. Control: PBS only

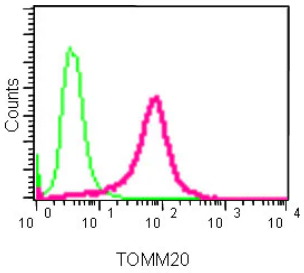
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).



Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TOMM20 antibody

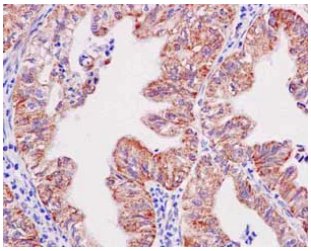
Immunofluorescence analysis of paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells, labeling TOMM20 (green) with ab186735 at 1/250 dilution. Alexa Fluor®488-conjugated goat anti-rabbit IgG was used as a secondary antibody at 1/200 dilution. Nuclei were counterstained with DAPI (blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).



Flow Cytometry (Intracellular) - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Flow Cytometry (Intracellular) staining using rabbit Anti-TOMM20 antibody

Intracellular Flow Cytometry analysis of TOMM20 expression in paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells cells using ab186735 at 1/90 dilution (red) and a rabbit IgG as negative control (green).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).

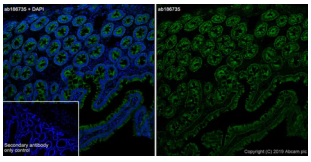


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TOMM20 antibody

Immunohistochemical analysis of paraffin-embedded human ovarian carcinoma tissue labeling TOMM20 with ab186735 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with hematoxylin.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).

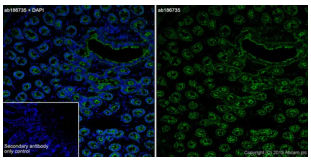
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunohistochemistry (Frozen sections) staining using rabbit Anti-TOMM20 antibody

Immunohistochemistry (Frozen sections) analysis of rat small intestine tissue sections labeling TOMM20 with Purified ab186735 at 1/50 (1.9 µg/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).

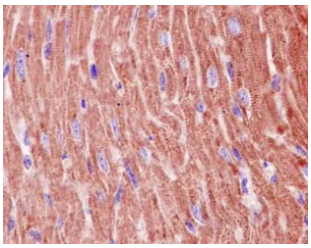


Immunohistochemistry (Frozen sections) - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunohistochemistry (Frozen sections) staining using rabbit Anti-TOMM20 antibody

Immunohistochemistry (Frozen sections) analysis of mouse small intestine tissue sections labeling TOMM20 with Purified ab186735 at 1/50 (1.9 µg/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).

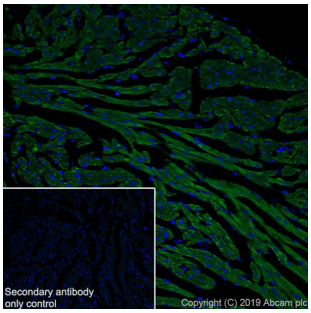


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TOMM20 antibody

Immunohistochemical analysis of paraffin-embedded mouse cardiac muscle tissue labeling TOMM20 with ab186735 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-TOMM20 antibody [EPR15581-54] - BSA and Azide free (ab232589)

TOMM20 Immunohistochemistry (Frozen sections) staining using rabbit Anti-TOMM20 antibody

Immunohistochemistry (Frozen sections) analysis of mouse cardiac muscle tissue sections labeling TOMM20 with Purified ab186735 at 1/50 (1.9 µg/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186735).

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