abcam

Product datasheet

Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker ab186735

Recombinant RabMAb

**** 8 Abreviews 115 References 12 Images

Overview

Product name Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker

Description Rabbit monoclonal [EPR15581-54] to TOMM20 - Mitochondrial Marker

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF, WB, IHC-P, IHC-Fr

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HepG2, HeLa, SH-SY5Y, PC-12 and NIH 3T3 cell lysates; IHC-P: Human ovarian carcinoma

and mouse cardiac muscle tissues; ICC/IF: HeLa cells; Flow Cyt (intra): HeLa cells; IHC-Fr:

Mouse cardiac and small intestine tissues.

General notesThis 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 production

For more information see here.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR15581-54

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab186735 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/90. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (5)	1/250.
WB	**** <u>(2)</u>	1/1000 - 1/10000. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr	★★★★ (1)	1/50. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20)

Target

Function Central component of the receptor complex responsible for the recognition and translocation of

cytosolically synthesized mitochondrial preproteins. Together with TOM22 functions as the transit

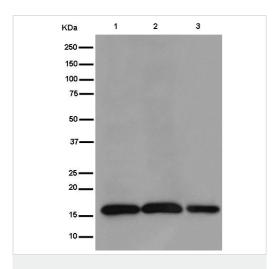
peptide receptor at the surface of the mitochondrion outer membrane and facilitates the

movement of preproteins into the TOM40 translocation pore.

Sequence similarities Belongs to the Tom20 family.

Cellular localization Mitochondrion outer membrane.

Images



Western blot - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

All lanes : Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735) at 1/10000 dilution

Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) cell lysate

Lane 2: HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

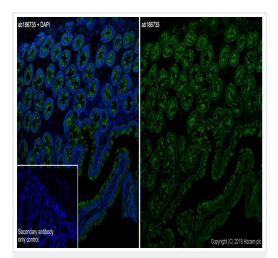
Lane 3: SH-SY5Y (human neuroblastoma cell line from bone marrow) cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

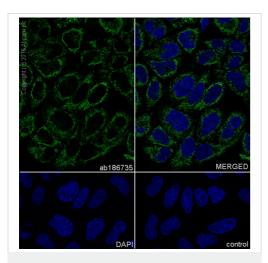
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 16 kDa **Observed band size:** 16 kDa



Immunohistochemistry (Frozen sections) - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

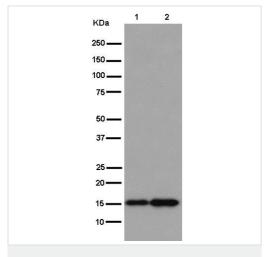
Immunohistochemistry (Frozen sections) analysis of rat small intestine tissue sections labeling TOMM20 with Purified ab186735 at 1/50 (1.9 μ g/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**)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



Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

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



Western blot - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

All lanes : Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735) at 1/2000 dilution

Lane 1 : PC-12 (rat adrenal gland pheochromocytoma cell line) cell lysate

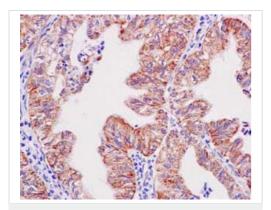
Lane 2: NIH/3T3 (mouse embyro fibroblast cell line) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 16 kDa **Observed band size:** 16 kDa

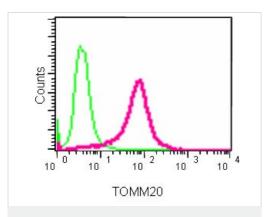


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TOMM20 antibody

[EPR15581-54] - Mitochondrial Marker (ab186735)

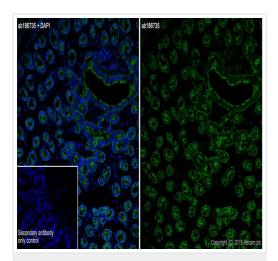
Immunohistochemical analysis of paraffin-embedded Human ovarian carcinoma tissue labeling TOMM20 with ab186735 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit lgG. Counter stained with Hematoxylin.

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



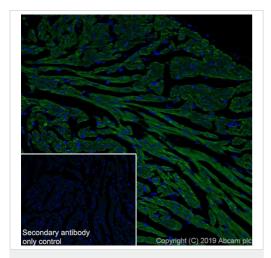
Flow Cytometry (Intracellular) - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

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).



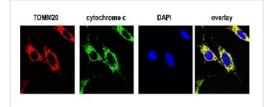
Immunohistochemistry (Frozen sections) - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

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



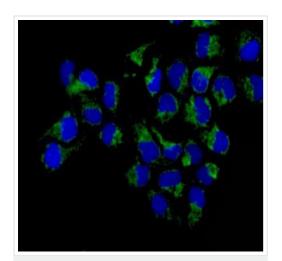
Immunohistochemistry (Frozen sections) - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

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 lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.



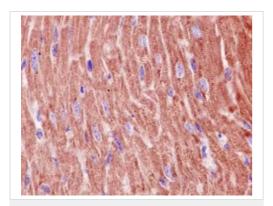
Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

Paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized human non-small cell lung carcinoma cells labeleing TOMM20 using ab186735 at 1/400 dilution for 3 hours at room temperature. A Goat anti-Rabbit lgG (H&L) AlexaFluor[®] was used as secondary antibody at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-54] - Mitochondrial Marker (ab186735)

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 lgG was used as a secondary antibody at 1/200 dilution. Nuclei were counterstained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TOMM20 antibody

[EPR15581-54] - Mitochondrial Marker (ab186735)

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.

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



specificity

Mitochondrial Marker (ab186735)

Anti-TOMM20 antibody [EPR15581-54] -

production

Our Abpromise to you: Quality guaranteed and expert technical support

Replacement or refund for products not performing as stated on the datasheet

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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