

Product datasheet

Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker ab186734

Recombinant RabMAb

★★★★★ 9 Abreviews 79 References 12 Images

Overview

Product name	Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker
Description	Rabbit monoclonal [EPR15581-39] to TOMM20 - Mitochondrial Marker
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), IHC-P, ICC/IF, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HepG2 and HeLa whole cell lysate (ab150035). IHC-P: Human endometrial adenocarcinoma, human cervical cancer, mouse cardiac muscle tissues, rat testis, mouse colon. ICC/IF: HeLa cells. Flow Cyt (intra): NCI-H2228 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.</p>

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	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR15581-39

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab186734 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)		1/40. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ (1)	1/50 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/250 - 1/500.
WB	★★★★★ (5)	1/1000 - 1/10000. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa).

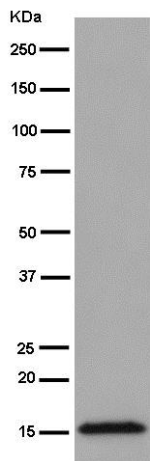
Target

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 [EPR15581-39] - Mitochondrial Marker (ab186734)

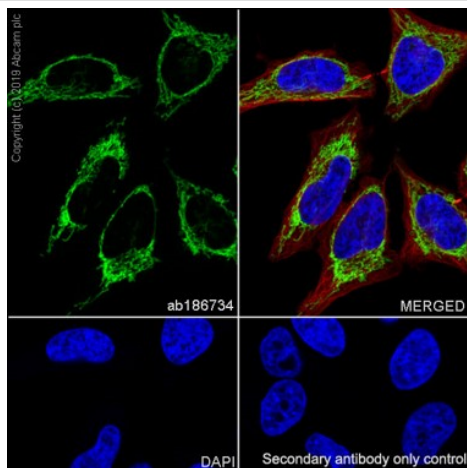
Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734) at 1/5000 dilution + HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 16 kDa

Observed band size: 16 kDa

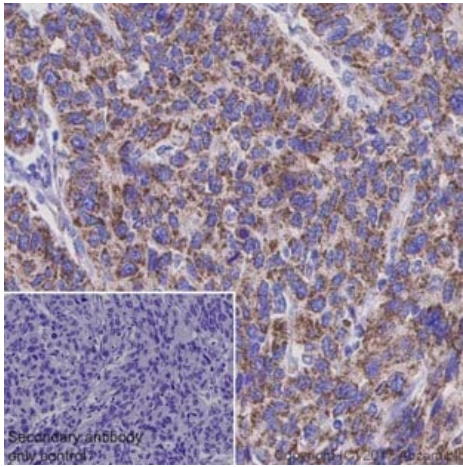


Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cells) labeling TOMM20 with ab186734 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% TritonX-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

ab195889, Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/100 was used as counterstain antibody.

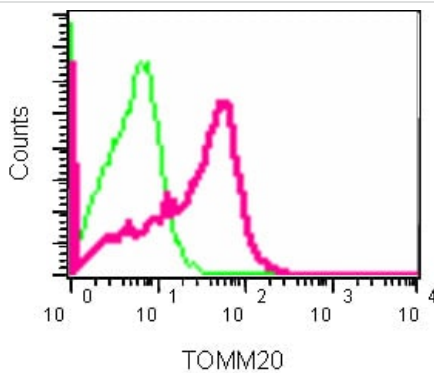
Confocal image showing cytoplasmic staining in HeLa cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

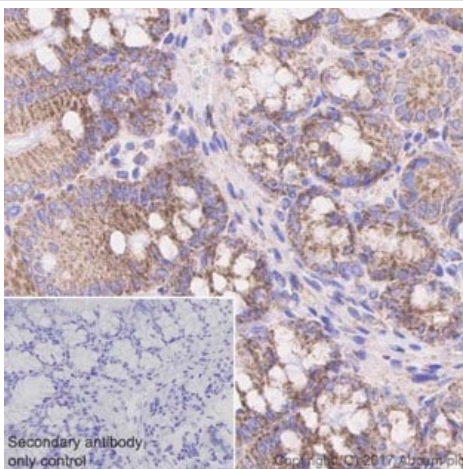
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue, labeling TOMM20 with ab186734 at 1/1000 dilution. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Granular cytoplasmic staining on human cervical cancer.



Flow Cytometry (Intracellular) - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

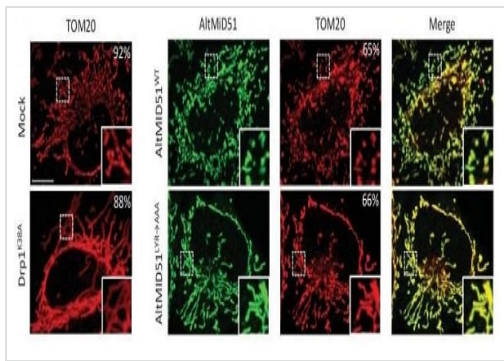
Intracellular Flow Cytometry analysis of TOMM20 expression in NCI-H2228 (Human lung cancer cell line) cells using ab186734 at 1/40 dilution (pink) and a rabbit IgG as negative control (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

Immunohistochemical analysis of paraffin-embedded mouse colon tissue, labeling TOMM20 with ab186734 at 1/1000 dilution. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Granular cytoplasmic staining on mouse colon.



Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

Samandi et al eLife. 2017; 6: e27860. Published online 2017 Oct 30. doi: 10.7554/eLife.27860

AltMiD51^{5'} expression induces mitochondrial fission.

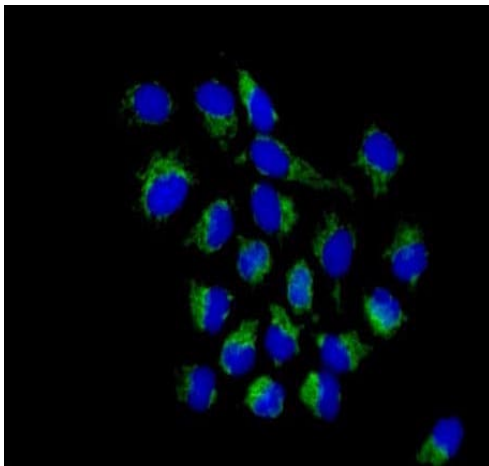
Confocal microscopy of mock-transfected cells, cells transfected with altMiD51^{WT}, altMiD51^{LYR→AAA} or Drp1^{K38A}; immunostained with anti-TOM20 (red channel) and anti-Flag (green channel) monoclonal antibodies. In each image, boxed areas are shown at higher magnification in the bottom right corner.

TOMM20 is detected using ab186734 at 1/500 dilution.

From Figure 12c of Samandi et al.

Samandi et al [eLife](https://doi.org/10.7554/eLife.27860). 2017; 6: e27860. Published online 2017 Oct 30. doi: [10.7554/eLife.27860](https://doi.org/10.7554/eLife.27860)

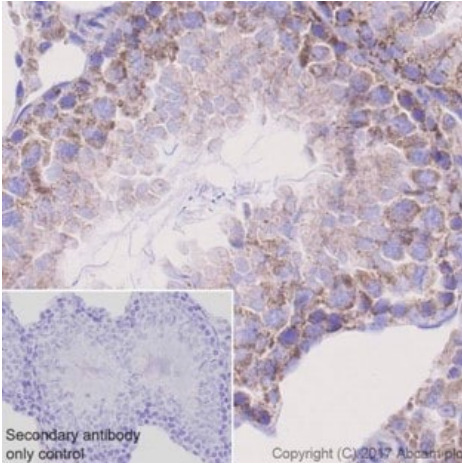
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Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

Immunofluorescence analysis of paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells, labeling TOMM20 (green) with ab186734 at 1/250 dilution.

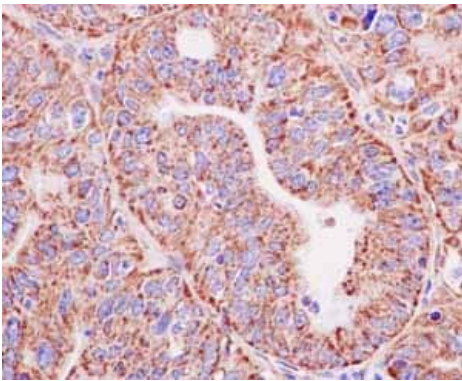
Alexa Fluor[®]488-conjugated goat anti-rabbit IgG was used as a secondary antibody at 1/200 dilution. Nuclei were counterstained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody
[EPR15581-39] - Mitochondrial Marker (ab186734)

Immunohistochemical analysis of paraffin-embedded rat testis tissue, labeling TOMM20 with ab186734 at 1/1000 dilution. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using **ab93684** (Tris/EDTA buffer, pH 9.0).

Granular cytoplasmic staining on rat testis.

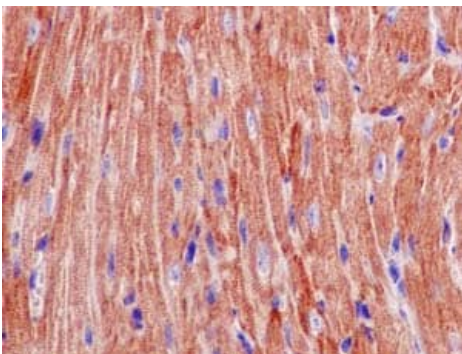


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody
[EPR15581-39] - Mitochondrial Marker (ab186734)

Immunohistochemical analysis of paraffin-embedded human endometrial adenocarcinoma tissue, labeling TOMM20 with ab186734 at 1/100 dilution.

Detected using HRP polymer for Rabbit IgG and counterstained using hematoxylin.

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

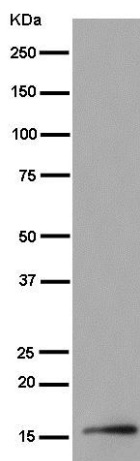


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody
[EPR15581-39] - Mitochondrial Marker (ab186734)

Immunohistochemical analysis of paraffin-embedded mouse cardiac muscle tissue labeling TOMM20 with ab186734 at 1/100 dilution.

Detected using HRP polymer for Rabbit IgG and counterstained using hematoxylin.

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



Western blot - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734) at 1/20000 dilution + HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 16 kDa

Observed band size: 16 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)

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

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