abcam

Product datasheet

Anti-TOMM20 antibody - Mitochondrial Marker ab56783

21 Abreviews 76 References 7 Images

Overview

Product name	Anti-TOMM20 antibody - Mitochondrial Marker
Description	Mouse monoclonal to TOMM20 - Mitochondrial Marker
Host species	Mouse
Tested applications	**Suitable for:** WB, IHC-P, Flow Cyt, IP, ICC/IF
Species reactivity	**Reacts with:** Rat, Human **Predicted to work with:** Mouse
Immunogen	Recombinant full length protein (GST-tag) corresponding to Human TOMM20 aa 1-145. Database link: Q15388
Positive control	WB: HeLa, PC-12 and NIH/3T3 cell lysates. IHC-P: Human small intestine. ICC/IF: HeLa cells.
General notes	This product was changed from ascites to tissue culture supernatant on 22 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal
Isotype	IgG1
Light chain type	kappa

Applications

Our Abpromise guarantee covers the use of **ab56783** 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
WB	★★★★☆	Use at an assay dependent concentration. Predicted molecular weight: 16 kDa.
IHC-P	★☆☆☆☆	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
ICC/IF	★★★★★	Use at an assay dependent concentration.

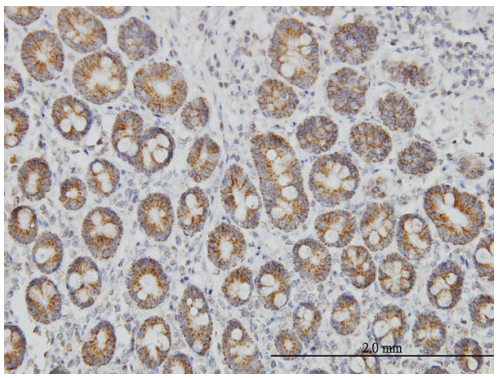
Target

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.

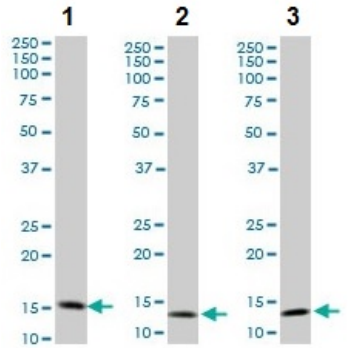
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human small intestine tissue labelling TOMM20 with ab56783 at 3 µg/ml.

This image was generated using the ascites version of the product.



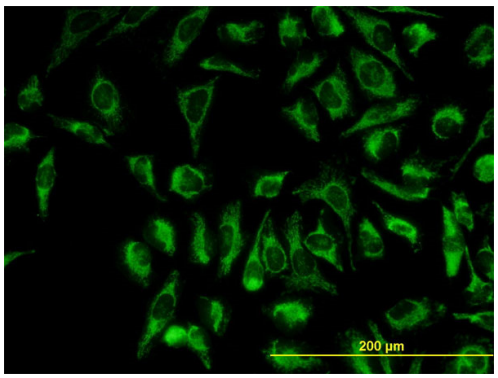
Western blot - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

All lanes : Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

Lane 1 : HeLa cell lysate
Lane 2 : PC-12 cell lysate
Lane 3 : NIH/3T3 cell lysate

Predicted band size: 16 kDa

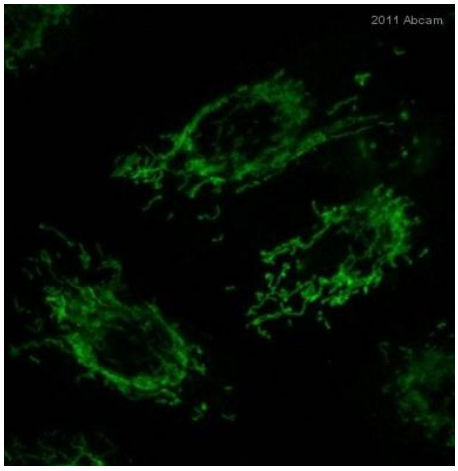
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling TOMM20 with ab56783 at 10 µg/ml. Cells are fixed with 4% PFA and permeabilized on ice in PBS 0.1% Triton. Samples were incubated with primary antibody at 4^{o}C overnight and fluorscein- conjugated secondary antibody at 4^{o}C for 1 hour.

This image was generated using the ascites version of the product.

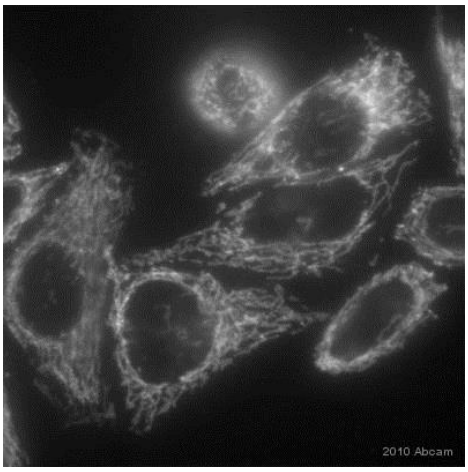


Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

This image is courtesy of an anonymous Abreview.

ab56783 staining TOMM20 in human keratinocytes by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with acetone and blocked with 1% BSA for 1 hour at 24°C. Samples were incubated with primary antibody (1/2000 in PBS + 1% BSA) for 24 hours at 4°C. An Alexa Fluor® 488-conjugated goat anti-mouse IgG polyclonal was used as the secondary antibody (1/5000).

This image was generated using the ascites version of the product.

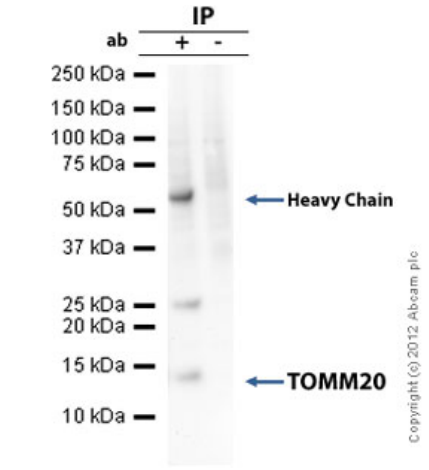


Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

This image is courtesy of an anonymous Abreview.

ab56783 staining TOMM20 in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with PBS + 0.1% Triton X-100 and blocked with PBS+ 0.5% BSA + 0.2% fish skin gelatin for 1 hour at 25°C. Samples were incubated with primary antibody (1/2000 in PBS + 1% BSA) for 24 hours at 4°C. An Alexa Fluor® 488-conjugated goat anti-mouse IgG polyclonal was used as the secondary antibody (1/500).

This image was generated using the ascites version of the product.



Immunoprecipitation - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

TOMM20 was immunoprecipitated using 0.5 mg HepG2 whole cell extract, 5 µg of Mouse monoclonal to TOMM20 (ab56783) and 50 µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10 min, HepG2 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10 min under agitation.

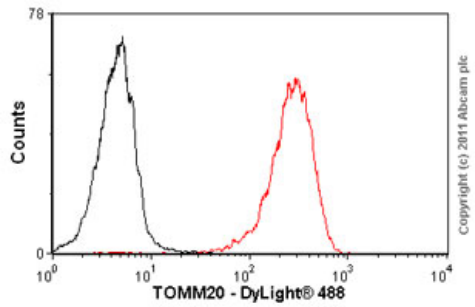
Proteins were eluted by addition of 40 µl SDS loading buffer and incubated for 10 min at 70°C; 10 µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab56783.

Secondary: Protein G-HRP at 1/500 dilution.

Band: 14kDa: TOMM20. Non specific - 25kDa: We are unsure as to

the identity of this extra band.

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-TOMM20 antibody - Mitochondrial Marker (ab56783)

Overlay histogram showing HeLa cells stained with ab56783 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab56783, 1 µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was a mix of mouse IgG1 [ICIGG1], (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4%PFA/permeabilized in 0.1% PBS-Tween used under the same conditions.

This image was generated using the ascites version of the product.

Our Abpromise to you: Quality guaranteed and expert technical support

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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors