

Product datasheet

Anti-TOMM20 antibody [4F3] - BSA and Azide free ab56783

★★★★★ [23 Abreviews](#) [198 References](#) [7 Images](#)

Overview

Product name	Anti-TOMM20 antibody [4F3] - BSA and Azide free
Description	Mouse monoclonal [4F3] to TOMM20 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, IP, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
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	<p>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.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal

Clone number	4F3
Isotype	IgG1
Light chain type	kappa

Applications

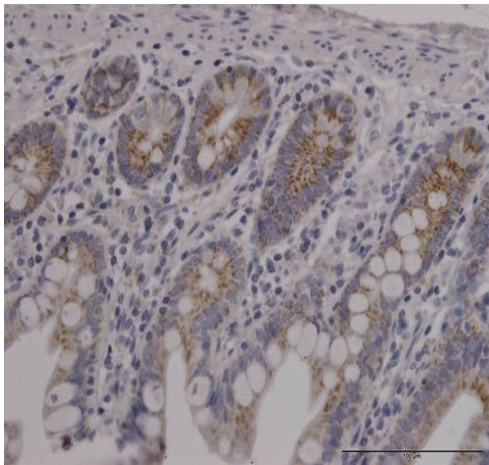
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab56783 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (9)	Use at an assay dependent concentration. Predicted molecular weight: 16 kDa.
IHC-P	★☆☆☆☆ (2)	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	★★★★★ (10)	Use at an assay dependent concentration.

Target

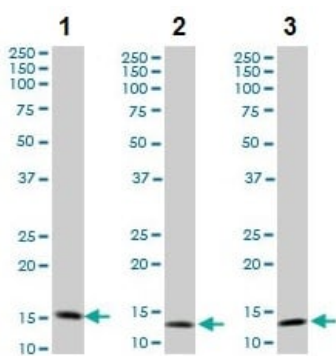
Function	Central component of the receptor complex responsible for the recognition and translocation of cytosolically synthesized mitochondrial preproteins. Together with TOM22 functions as the transit peptide receptor at the surface of the mitochondrion outer membrane and facilitates the movement of preproteins into the TOM40 translocation pore.
Sequence similarities	Belongs to the Tom20 family.
Cellular localization	Mitochondrion outer membrane.

Images



Paraffin embedded human small intestine tissue stained for TOMM20 using ab56783 at 3 µg/ml in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM20 antibody [4F3] - BSA and Azide free (ab56783)



All lanes : Anti-TOMM20 antibody [4F3] - BSA and Azide free (ab56783)

Lane 1 : HeLa cell lysate

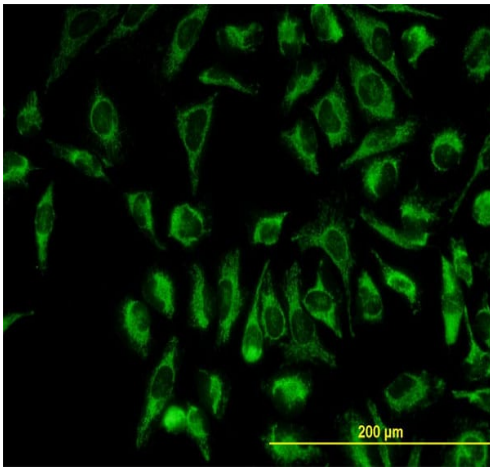
Lane 2 : PC-12 cell lysate

Lane 3 : NIH/3T3 cell lysate

Predicted band size: 16 kDa

Western blot - Anti-TOMM20 antibody [4F3] - BSA and Azide free (ab56783)

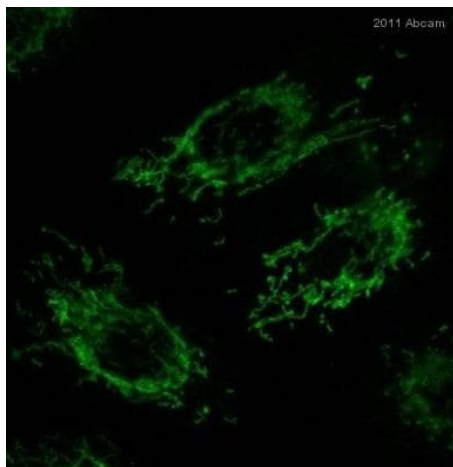
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [4F3] - BSA and Azide free (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°C overnight and fluorescein- conjugated secondary antibody at 4°C for 1 hour.

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

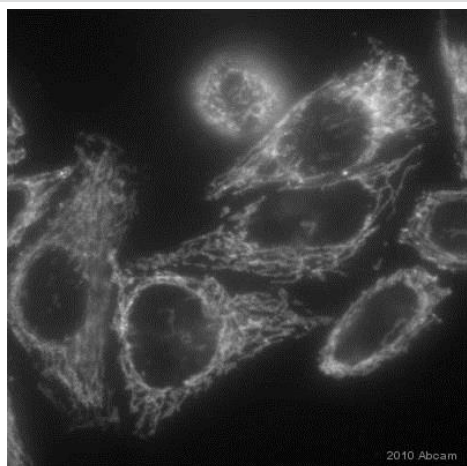


Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [4F3] - BSA and Azide free (ab56783)

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.



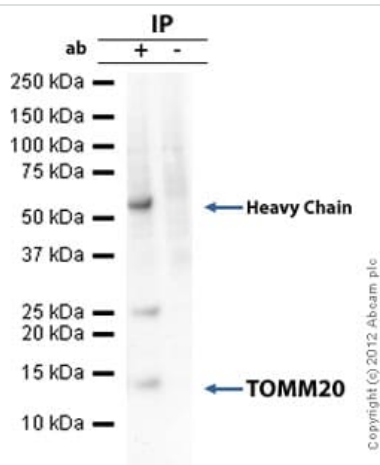
Immunocytochemistry/ Immunofluorescence - Anti-TOMM20 antibody [4F3] - BSA and Azide free (ab56783)

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 [4F3] - BSA and Azide free (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 (-).

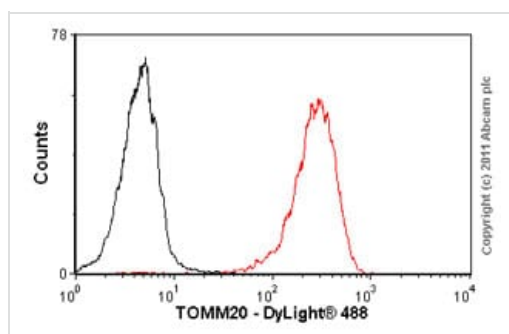
The antibody was incubated under agitation with Protein G beads for 10 min, HepG2 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10 min under agitation.

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 [4F3] - BSA and Azide free (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 μ g/ 1×10^6 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](#), 2 μ g/ 1×10^6 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.

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

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