abcam

ab57523

Anti-TOMM22/TOM22 antibody [4G4]

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 49.103% 1X PBS, 0.877% Sodium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human TOMM22. Database link Q9NS69
Clone number	4G4
Purification technique	Affinity purification
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Expected

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

WB

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

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

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Target data

See full target information TOMM22

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 the peripheral receptor TOMM20, functions as the transit peptide receptor and facilitates the movement of preproteins into the translocation pore (PubMed:10982837). 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	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

This product was changed from ascites to tissue culture supernatant on 15 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.

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

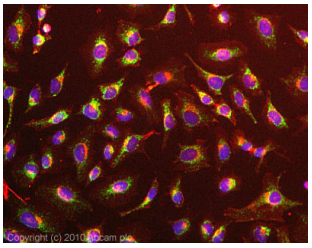
We do not recommend this combination. It is not covered by our product promise.

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.

6 product images

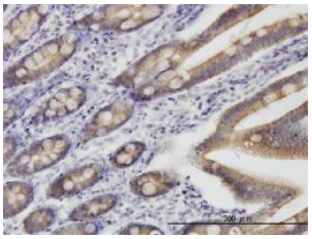


Immunocytochemistry/ Immunofluorescence - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

TOMM22/TOM22 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-TOMM22/TOM22 antibody

ICC/IF image of ab57523 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab57523, 10µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

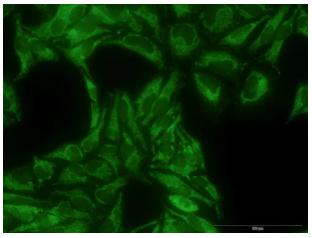
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

TOMM22/TOM22 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-TOMM22/TOM22 antibody

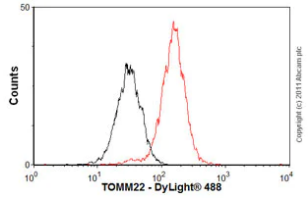
TOMM22/TOM22 antibody (ab57523) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human small Intestine.
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

TOMM22/TOM22 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-TOMM22/TOM22 antibody

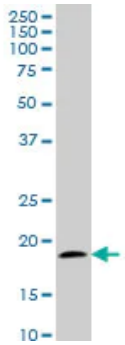
Immunocytochemistry/ Immunofluorescence of TOMM22 in HeLa cell using ab57523 at 10 µg/ml.



Flow Cytometry - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

TOMM22/TOM22 Flow Cytometry staining using mouse Anti-TOMM22/TOM22 antibody

Overlay histogram showing HeLa cells stained with ab57523 (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 (ab57523, 1µg/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 mouse IgG2a [ICIGG2A] (ab91361, 1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.
This image was generated using the ascites version of the product.



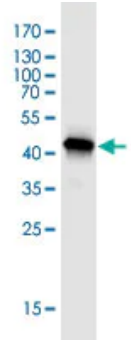
Western blot - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

TOMM22/TOM22 Western blot staining using mouse Anti-TOMM22/TOM22 antibody

TOMM22/TOM22 antibody (ab57523) at 1ug/lane + NIH/3T3 cell lysate at 25ug/lane.
This image was generated using the ascites version of the product.

All lanes:
Western blot - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

Predicted band size: 15 kDa



Western blot - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

GST tag MW is 26kDa.
All lanes:
Western blot - Anti-TOMM22/TOM22 antibody [4G4] (ab57523)

All lanes:
immunogen peptide, Full length TOMM22 / TOM22 with GST tag.

Predicted band size: 15 kDa

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