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TOMM40 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22253a

Product Information

Application	WB, FC, IF, E
Primary Accession	O96008
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56900
Calculated MW	37893

Additional Information

Gene ID	10452
Other Names	Mitochondrial import receptor subunit TOM40 homolog, Protein Haymaker, Translocase of outer membrane 40 kDa subunit homolog, p38.5, TOMM40, C19orf1, PEREC1, TOM40
Target/Specificity	This TOMM40 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 22-56 amino acids from human TOMM40.
Dilution	WB~~1:2000 FC~~1:25 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TOMM40 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TOMM40
Synonyms	C19orf1, PEREC1, TOM40
Function	Channel-forming protein that forms part of the translocase of the outer mitochondrial membrane (TOM) complex essential for the recognition and

translocation of cytosolically synthesized mitochondrial preproteins (PubMed:15644312, PubMed:31206022, PubMed:40080546). 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). Plays a role in the assembly of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) by forming a complex with BCAP31 and mediating the translocation of Complex I components from the cytosol to the mitochondria (PubMed:31206022).

Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein. Note=Associates with the mitochondria- associated ER membrane via interaction with BCAP31

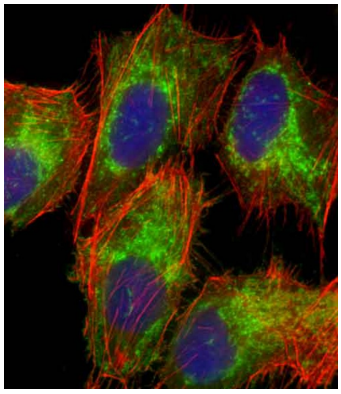
Background

Channel-forming protein essential for import of protein precursors into mitochondria.

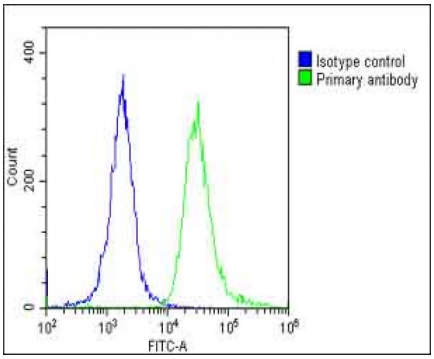
References

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Das B.,et al.Int. J. Cancer 94:800-806(2001).
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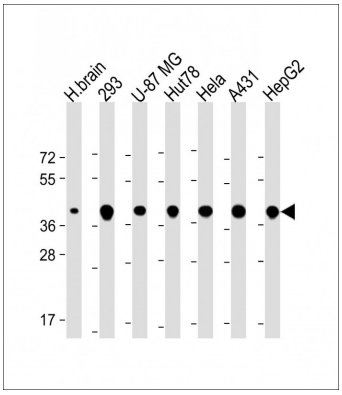
Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling TOMM40 with AP22253a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing mitochondrion staining on U-2 OS cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).



Overlay histogram showing HeLa cells stained with AP22253a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22253a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-TOMM40 Antibody (N-Term) at 1:2000 dilution Lane 1: Human brain lysate Lane 2: 293 whole cell lysate Lane 3: U-87 MG whole cell lysate Lane 4: Hut78 whole cell lysate Lane 5: Hela whole cell lysate Lane 6: A431 whole cell lysate Lane 7: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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