

## TOMM40 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22253a

## **Specification**

# TOMM40 Antibody (N-Term) - Product Information

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

# TOMM40 Antibody (N-Term) - 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**

IF~~1:25 WB~~1:2000 FC~~1:25

## **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.

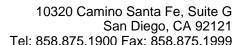
## **Precautions**

TOMM40 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## TOMM40 Antibody (N-Term) - Protein Information

## Name TOMM40

Synonyms C19orf1, PEREC1, TOM40





**Function** Channel-forming protein essential for import of protein precursors into mitochondria (PubMed: 15644312, PubMed: 31206022). 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**

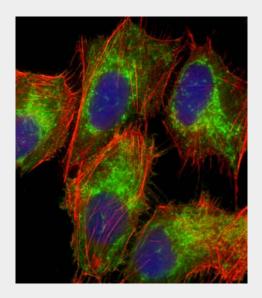
Mitochondrion outer membrane; Multi-pass membrane protein. Note=Associates with the mitochondria- associated ER membrane via interaction with BCAP31

# **TOMM40 Antibody (N-Term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

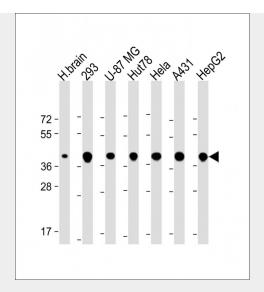
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## TOMM40 Antibody (N-Term) - Images

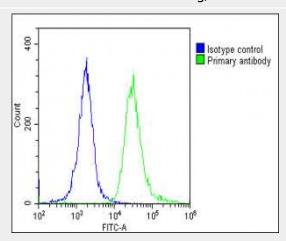


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling TOMM40 with AP22253a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence 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).





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.



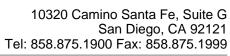
Overlay histogram showing HeLa cells stained with AP22253a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the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

#### TOMM40 Antibody (N-Term) - Background

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

# TOMM40 Antibody (N-Term) - References

Freitas E.M., et al. DNA Seq. 9:89-100(1998). Yoshiura K., et al. Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases. Das B., et al. Int. J. Cancer 94:800-806(2001). Lubec G., et al. Submitted (MAR-2007) to UniProtKB.





Johnston A.J., et al.J. Biol. Chem. 277:42197-42204(2002).