

# Anti-TOMM20/Tom20 Rabbit Monoclonal Antibody

Catalog # ABO13830

## Product Information

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|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC, IF, ICC, FC                                                                                                                                |
| <b>Primary Accession</b> | <a href="#">Q15388</a>                                                                                                                              |
| <b>Host</b>              | Rabbit                                                                                                                                              |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                                          |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                                                   |
| <b>Clonality</b>         | Monoclonal                                                                                                                                          |
| <b>Format</b>            | Liquid                                                                                                                                              |
| <b>Description</b>       | Anti-TOMM20/Tom20 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

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|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 9804                                                                                                                                                            |
| <b>Other Names</b>              | Mitochondrial import receptor subunit TOM20 homolog, Mitochondrial 20 kDa outer membrane protein, Outer mitochondrial membrane receptor Tom20, TOMM20, KIAA0016 |
| <b>Calculated MW</b>            | 16298                                                                                                                                                           |
| <b>Application Details</b>      | WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:100                                                                                              |
| <b>Subcellular Localization</b> | Mitochondrion outer membrane ; Single-pass membrane protein.                                                                                                    |
| <b>Source</b>                   | Eukaryota                                                                                                                                                       |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                             |
| <b>Clone Names</b>              | Clone: EOC-20                                                                                                                                                   |
| <b>Immunogen</b>                | A synthesized peptide derived from human TOMM20                                                                                                                 |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                         |
| <b>Storage</b>                  | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.                      |

## Protein Information

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|-------------|--------|
| <b>Name</b> | TOMM20 |
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## Synonyms

KIAA0016

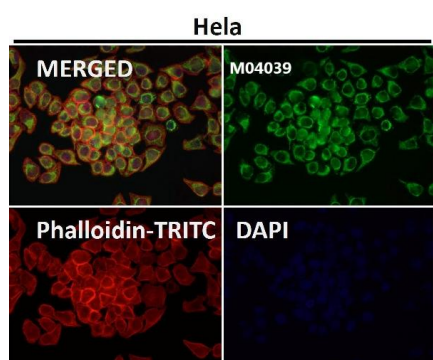
## Function

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 TOMM22 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 (PubMed:[18331822](#)). 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).

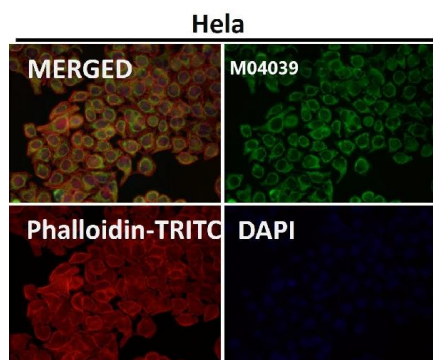
## Cellular Location

Mitochondrion outer membrane; Single-pass membrane protein

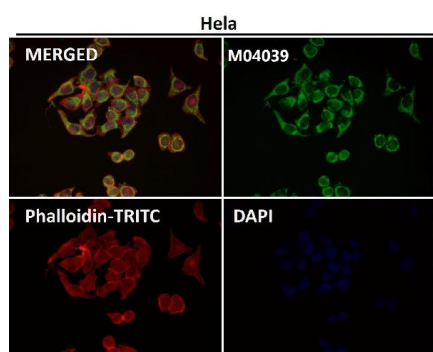
## Images



Immunofluorescent analysis using the Antibody at 1:50 dilution.

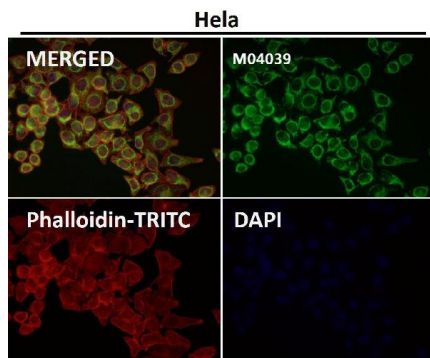


Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.

Immunofluorescent analysis using the Antibody at 1:500 dilution.



Immunofluorescent analysis of HeLa cells, using TOMM20 Antibody .

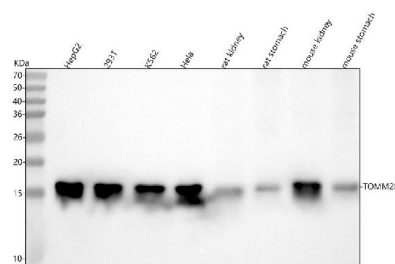
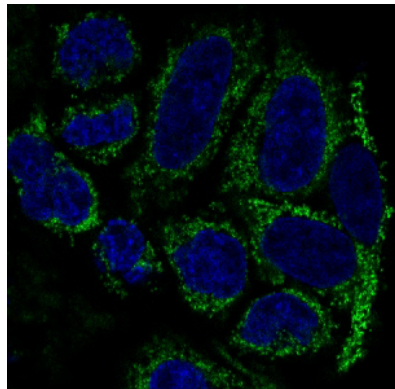
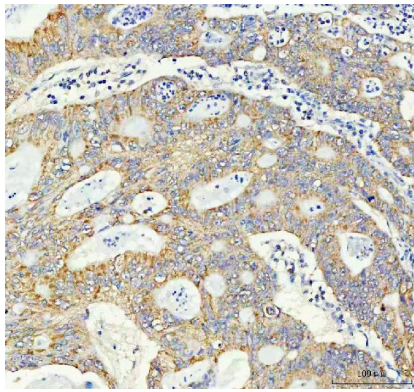


Figure 1. Western blot analysis of TOMM20/Tom20 using anti-TOMM20/Tom20 antibody (M04039). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: human HeLa whole cell lysates, Lane 5: rat kidney tissue lysates, Lane 6: rat stomach tissue lysates, Lane 7: mouse kidney tissue lysates, Lane 8: mouse stomach tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TOMM20/Tom20 antigen affinity purified monoclonal antibody (Catalog # M04039) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TOMM20/Tom20 at approximately 16 kDa. The expected band size for TOMM20/Tom20 is at 16 kDa.

Figure 2. IHC analysis of TOMM20 using anti-TOMM20 antibody (M04039). TOMM20 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked



with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-TOMM20 Antibody (M04039) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

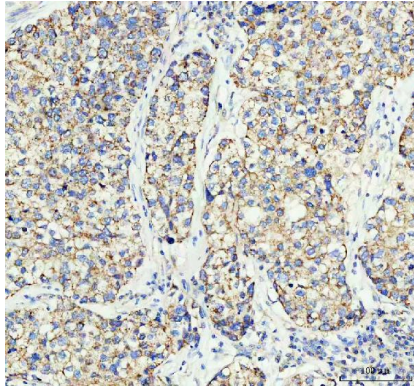


Figure 3. IHC analysis of TOMM20 using anti-TOMM20 antibody (M04039). TOMM20 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-TOMM20 Antibody (M04039) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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