# Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker ab186734

## Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker</th>
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</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR15581-39] to TOMM20 - Mitochondrial Marker</td>
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<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: IHC-P, Flow Cyt, ICC/IF, WB</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
</tbody>
</table>
| Immunogen | Recombinant fragment within Human TOMM20 aa 1 to the C-terminus. The exact sequence is proprietary.  
Database link: Q15388 |
| General notes | Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents.  
This product is a recombinant rabbit monoclonal antibody. |

## Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
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</table>
| Storage buffer | Preservative: 0.01% Sodium azide  
Constituents: PBS, 40% Glycerol, 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR15581-39 |
| Isotype | IgG |
**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 mitochondrial 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.

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**Applications**

Our **Abpromise guarantee** covers the use of ab186734 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/50 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>Flow Cyt</td>
<td>1/40.</td>
<td>ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>1/250 - 1/500.</td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/1000 - 1/10000. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa).</td>
</tr>
</tbody>
</table>

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**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 mitochondrial 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.

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**Images**

Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734) at 1/5000 dilution + HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate at 20 µg

**Secondary**
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

**Predicted band size**: 16 kDa
**Observed band size**: 16 kDa

Western blot - Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734)
Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cells) labeling TOMM20 with ab186734 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% TritonX-100. 

*ab150077*, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

*ab195889*, Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/100 was used as counterstain antibody.

Confocal image showing cytoplasmic staining in HeLa cells.

Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue, labeling TOMM20 with ab186734 at 1/1000 dilution. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using *ab93684* (Tris/EDTA buffer, pH 9.0).

Granular cytoplasmic staining on human cervical cancer.
Flow cytometry analysis of TOMM20 expression in NCI-H2228 (Human lung cancer cell line) cells using ab186734 at 1/40 dilution (pink) and a rabbit IgG as negative control (green).

Immunohistochemical analysis of paraffin-embedded mouse colon tissue, labeling TOMM20 with ab186734 at 1/1000 dilution. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using ab93684 (Tris/EDTA buffer, pH 9.0).
Granular cytoplasmic staining on mouse colon.

AltMiD51<sup>5</sup> expression induces mitochondrial fission.

Confocal microscopy of mock-transfected cells, cells transfected with altMiD51<sup>WT</sup>, altMiD51<sup>K38A</sup> or Drp1<sup>K38A</sup> immunostained with anti-TOM20 (red channel) and anti-Flag (green channel) monoclonal antibodies. In each image, boxed areas are shown at higher magnification in the bottom right corner.

TOMM20 is detected using ab186734 at 1/500 dilution.

From Figure 12c of Samandi et al.

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Immunofluorescence analysis of paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells, labeling TOMM20 (green) with ab186734 at 1/250 dilution.

Alexa Fluor®488-conjugated goat anti-rabbit IgG was used as a secondary antibody at 1/200 dilution. Nuclei were counterstained with DAPI (blue).

Immunohistochemical analysis of paraffin-embedded rat testis tissue, labeling TOMM20 with ab186734 at 1/1000 dilution. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated using ab93684 (Tris/EDTA buffer, pH 9.0).

Granular cytoplasmic staining on rat testis.

Immunohistochemical analysis of paraffin-embedded human endometrial adenocarcinoma tissue, labeling TOMM20 with ab186734 at 1/100 dilution.

Detected using HRP polymer for Rabbit IgG and counterstained using hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.
Immunohistochemical analysis of paraffin-embedded mouse cardiac muscle tissue labeling TOMM20 with ab186734 at 1/100 dilution.

Detected using HRP polymer for Rabbit IgG and counterstained using hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

**Western blot**

Anti-TOMM20 antibody [EPR15581-39] - Mitochondrial Marker (ab186734) at 1/20000 dilution + HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate at 20 µg

**Secondary**

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

**Predicted band size:** 16 kDa

**Observed band size:** 16 kDa

**Please note:** All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

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