

## **TMEM147 Antibody**

Catalog # ASC11365

## Specification

## **TMEM147 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, E Q9BVK8

NP\_116024, 14249166 Human, Mouse, Rat Rabbit

Polyclonal

IgG

TMEM147 antibody can be used for

detection of TMEM147 by Western blot at 1

- 2 μg/mL.

## **TMEM147 Antibody - Additional Information**

Gene ID **10430** 

Target/Specificity

TMEM147;

## **Reconstitution & Storage**

TMEM147 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

## **Precautions**

TMEM147 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **TMEM147 Antibody - Protein Information**

Name TMEM147 {ECO:0000303|PubMed:20538592, ECO:0000312|HGNC:HGNC:30414}

### **Function**

Component of the multi-pass translocon (MPT) complex that mediates insertion of multi-pass membrane proteins into the lipid bilayer of membranes (PubMed:<a href="http://www.uniprot.org/citations/32820719" target="\_blank">32820719</a>, PubMed:<a href="http://www.uniprot.org/citations/36261522" target="\_blank">36261522</a>). The MPT complex takes over after the SEC61 complex: following membrane insertion of the first few transmembrane segments of proteins by the SEC61 complex, the MPT complex occludes the lateral gate of the SEC61 complex to promote insertion of subsequent transmembrane regions (PubMed:<a href="http://www.uniprot.org/citations/36261522" target="\_blank">36261522</a>). Also acts as a negative regulator of CHRM3 function, most likely by interfering with its trafficking to the cell membrane (PubMed:<a href="http://www.uniprot.org/citations/21056967" target="\_blank">21056967</a>). Negatively regulates CHRM3-mediated calcium mobilization and activation of RPS6KA1/p90RSK activity (PubMed:<a



href="http://www.uniprot.org/citations/21056967" target="\_blank">21056967</a>). Regulates LBR localization to the nucleus inner membrane (PubMed:<a href="http://www.uniprot.org/citations/32694168" target=" blank">32694168</a>).

#### **Cellular Location**

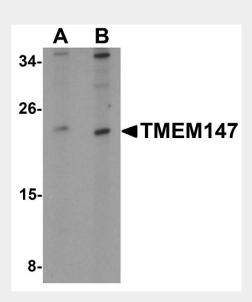
Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus membrane; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:I6VSD2}; Multi-pass membrane protein

### **TMEM147 Antibody - Protocols**

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

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

## TMEM147 Antibody - Images



Western blot analysis of TMEM147 in Daudi cell lysate with TMEM147 antibody at (A) 1 and (B) 2  $\mu$ g/mL.

# TMEM147 Antibody - Background

TMEM147 Antibody: TMEM147 is a recently identified protein that associates with Nicalin and NOMO, forming a complex that is thought to be similar to the gamma-secretase complex. TMEM147 localizes to the endoplasmic reticulum (ER), and in zebrafish, is expressed during early development. TMEM147 also interacts with the M3 muscarinic receptor (M3R) in the ER and is thought to negatively its expression and function.

## **TMEM147 Antibody - References**





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Dettmer U, Kuhn PH, Abou-Ajram C, et al. Transmembrane protein 147 (TMEM147) is a novel component of the Nicalin-NOMO protein complex. J. Biol. Chem. 2010; 285:26174-81 Rosemond E, Rossi M, McMillin SM, et al. Regulation of M3 muscarinic receptor expression and function by transmembrane protein 147. Mol. Pharmacol. 2011; 79:251-61.