

TMEM147 Antibody

Catalog # ASC11365

Specification

TMEM147 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype **Application Notes**

WB O9BVK8 NP 116024, 14249166

Human, Mouse, Rat **Rabbit**

Polyclonal

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: 32820719, PubMed:36261522). 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:36261522). Also acts as a negative regulator of CHRM3 function, most likely by interfering with its trafficking to the cell membrane (PubMed: 21056967). Negatively regulates CHRM3-mediated calcium mobilization and activation of RPS6KA1/p90RSK activity (PubMed:<a



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

Cellular Location

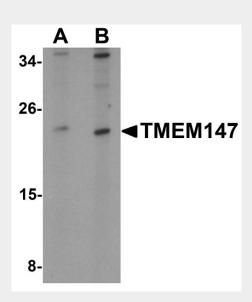
Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus membrane; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:I6VSD2}; Multi-pass membrane protein

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 μ 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





Tel: 858.875.1900 Fax: 858.875.1999

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.