

TMEM147 Antibody

Catalog # ASC11365

Product Information

Application	WB, E
Primary Accession	Q9BVK8
Other Accession	NP_116024 , 14249166
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	25261
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TMEM147 antibody can be used for detection of TMEM147 by Western blot at 1 - 2 µg/mL.

Additional Information

Gene ID	10430
Other Names	Transmembrane protein 147, Protein NIFIE 14, TMEM147
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.

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:[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

Background

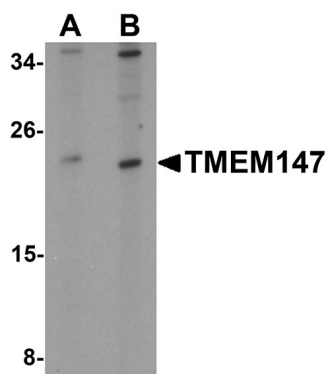
TMEM147 Antibody: TMEM147 is a recently identified protein that associates with Nicalin and NOMO, forming a complex that is thought to be similar to the gamma-secretase complex. TMEM147 localizes to the endoplasmic reticulum (ER), and in zebrafish, is expressed during early development. TMEM147 also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

References

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.

Images



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

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