

TMEM59L Antibody

Catalog # ASC11356

Specification

TMEM59L Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O9UK28</u> NP_036241, 6912274 Human, Mouse, Rat Rabbit Polyclonal IgG TMEM59L antibody can be used for detection of TMEM59L by Western blot at 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

TMEM59L Antibody - Additional Information

Gene ID

25789

Target/Specificity TMEM59L; Multiple isoforms of TMEM59L are known to exist. TMEM59L antibody is predicted to not cross-react TMEM59.

Reconstitution & Storage

TMEM59L 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

TMEM59L Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TMEM59L Antibody - Protein Information

Name TMEM59L

Synonyms BSMAP, C19orf4

Function

Modulates the O-glycosylation and complex N-glycosylation steps occurring during the Golgi maturation of APP. Inhibits APP transport to the cell surface and further shedding.

Cellular Location

Golgi apparatus membrane; Single-pass type I membrane protein



Tissue Location

Expressed preferentially at high level in the brain

TMEM59L Antibody - Protocols

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

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

TMEM59L Antibody - Images



Western blot analysis of TMEM59L in rat heart tissue lysate with TMEM59L antibody at 1 µg/mL.



Immunohistochemistry of TMEM59L in mouse brain tissue with TMEM59L antibody at 2.5 µg/mL.





Immunofluorescence of TMEM59L in mouse brain tissue with TMEM59L antibody at 20 µg/mL.

TMEM59L Antibody - Background

TMEM59L Antibody: Processing of the amyloid precursor protein (APP) by two different proteases, called alpha- and beta-secretase, is a central regulatory event in the generation of the amyloid beta peptide (Abeta), which has a key role in Alzheimer disease (AD) pathogenesis. TMEM59L is a type I membrane glycoprotein that is expressed in the brain. A related protein, TMEM59, is a Golgi-localized protein that modulates the O-glycosylation and complex N-glycosylation steps occurring during the Golgi maturation of several proteins such as APP, BACE1, SEAP or PRNP and inhibits APP transport and shedding.

TMEM59L Antibody - References

Schöbel S, Neumann S, Seed B, et al. Expression cloning screen for modifiers of amyloid precursor protein shedding. Int. J. Dev. Neurosci. 2006; 24:141-8.

Schöbel S, Neumann S, Hertweck M, et al. A novel sorting nexin modulates endocytic trafficking and alpha-secretase cleavage of the amyloid precursor protein. J. Biol. Chem. 2008; 283:14257-68. Elson GC, de Coignac AB, Aubry JP, et al. BSMAP, a novel protein expressed specifically in the brain whose gene is localized on chromosome 19p12. Biochem. Biophys. Res. Commun. 1999; 264:55-62. Ullrich S, Münch A, Neumann S, et al. The novel membrane protein TMEM59 modulates complex glycosylation, cell surface expression, and secretion of the amyloid precursor protein. J. Biol. Chem. 2010; 285:20664-74.