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TMEM59L Antibody

Catalog # ASC11356

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UK28
Other Accession	NP_036241, 6912274
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	37619
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	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.

Additional Information

Gene ID	25789
Other Names	Transmembrane protein 59-like, Brain-specific membrane-anchored protein, TMEM59L, BSMAP, C19orf4
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℃ for three months and -20℃, 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.

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

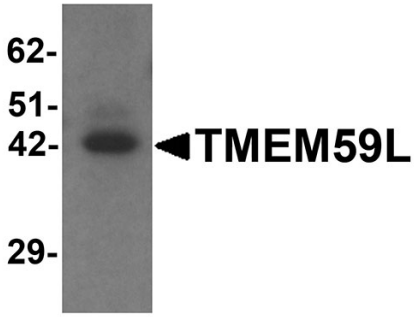
Background

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.

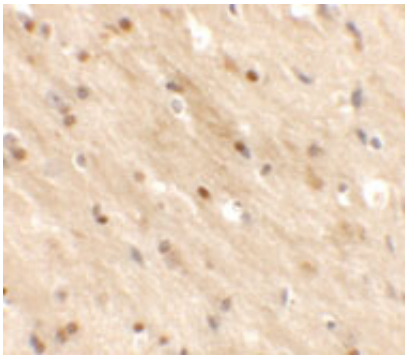
References

Sch bel 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.
Sch bel 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.

Images

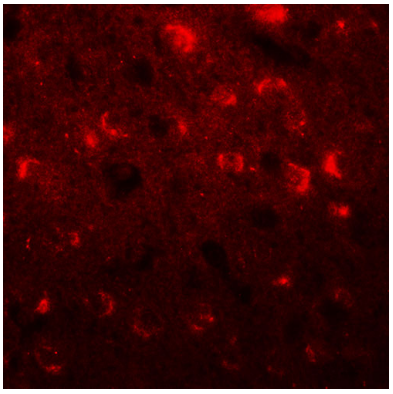


Western blot analysis of TMEM59L in rat heart tissue lysate with TMEM59L antibody at 1 µg/mL.



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.



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