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TMEM106B Antibody
Catalog # ASC11462

Specification

TMEM106B Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9NUM4
Other Accession	NP_060844, 40254893
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 30 kDa** **Observed: 33 kDa KDa**
Application Notes	**TMEM106B antibody can be used for detection of TMEM106B by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 2.5 µg/mL.**

TMEM106B Antibody - Additional Information

Gene ID	**54664**

Target/Specificity
TMEM106B; This TMEM106B antibody is predicted to have no cross-reactivity to TMEM106A.

Reconstitution & Storage
TMEM106B 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
TMEM106B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TMEM106B Antibody - Protein Information

Name TMEM106B (HGNC:22407)

Function
In neurons, involved in the transport of late endosomes/lysosomes (PubMed:25066864). May be involved in dendrite morphogenesis and maintenance by regulating lysosomal trafficking (PubMed:25066864). May act as a molecular brake for retrograde transport of late endosomes/lysosomes, possibly via its interaction with MAP6 (By similarity). In motoneurons, may mediate the axonal transport of

lysosomes and axonal sorting at the initial segment (By similarity). It remains unclear whether TMEM106B affects the transport of moving lysosomes in the anterograde or retrograde direction in neurites and whether it is important in the sorting of lysosomes in axons or in dendrites (By similarity). In neurons, may also play a role in the regulation of lysosomal size and responsiveness to stress (PubMed:25066864). Required for proper lysosomal acidification (By similarity).

Cellular Location
Late endosome membrane; Single-pass type II membrane protein. Lysosome membrane; Single-pass type II membrane protein. Cell membrane; Single-pass type II membrane protein. Note=Colocalizes with LAMP1. A small fraction resides on the cell surface (PubMed:37421949).

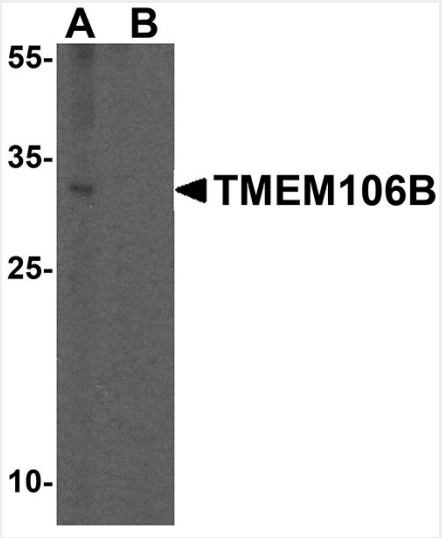
Tissue Location
Expressed in the brain, including in the frontal cortex (at protein level) (PubMed:35247328, PubMed:35344985). Expressed in lung epithelial cells (PubMed:33686287)

TMEM106B Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TMEM106B Antibody - Images



Western blot analysis of TMEM106B in human brain tissue lysate with TMEM106B antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

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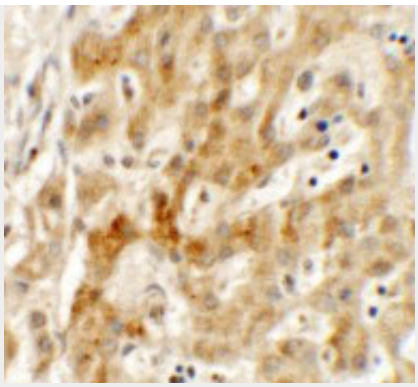
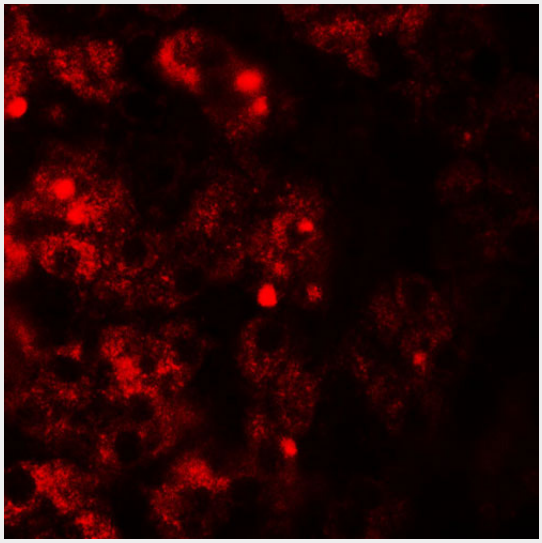


Immunohistochemistry of TMEM106B in human liver tissue with TMEM106B antibody at 2.5 µg/mL.



Immunofluorescence of TMEM106B in human liver tissue with TMEM106A antibody at 20 µg/mL.

TMEM106B Antibody - Background

TMEM106B Antibody: Transmembrane protein 106B (TMEM106B) is a single-pass transmembrane protein that is thought to be a novel risk factor for frontotemporal lobar degeneration (FTLD), a group of clinically, pathologically and genetically heterogeneous disorders associated with atrophy in the frontal lobe and temporal lobe of the brain. The actual role of TMEM106B, and that of the closely related protein TMEM106A are still undetermined.

TMEM106B Antibody - References

Van Deerlin VM, Sleiman PM, Martinez-Lage M, et al. Common variants at 7p21 are associated with frontotemporal lobar degeneration with TDP-43 inclusions. Nat. Genet. 2010; 42:234-9.
Aswathy PM, Jairani PS, and Mathuranath PS. Genetics of frontotemporal lobar degeneration. Ann. Indian Acad. Neurol. 2010; 13(Suppl 2):S55-62.