

# TMEM106B Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22247b

### Specification

# **TMEM106B Antibody (C-Term) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW WB, FC,E <u>O9NUM4</u> <u>O3ZC25, O80X71, O6AYA5</u> Human, Mouse Bovine, Rat Rabbit polyclonal Rabbit IgG 31127

## TMEM106B Antibody (C-Term) - Additional Information

Gene ID 54664

Other Names Transmembrane protein 106B, TMEM106B

Target/Specificity

This TMEM106B antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 218-252 amino acids from human TMEM106B.

Dilution WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** TMEM106B Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

# TMEM106B Antibody (C-Term) - Protein Information

Name TMEM106B (<u>HGNC:22407</u>)



**Function** In neurons, involved in the transport of late endosomes/lysosomes (PubMed:<u>25066864</u>). May be involved in dendrite morphogenesis and maintenance by regulating lysosomal trafficking (PubMed:<u>25066864</u>). 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:<u>25066864</u>). 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**

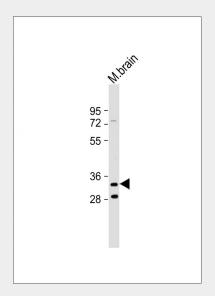
Expressed in the brain, including in the frontal cortex (at protein level) (PubMed:35247328, PubMed:35344985). Expressed in lung epithelial cells (PubMed:33686287)

## **TMEM106B Antibody (C-Term) - Protocols**

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

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

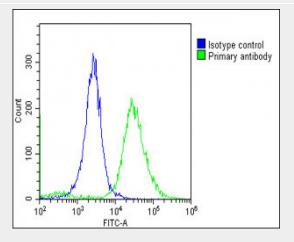
### TMEM106B Antibody (C-Term) - Images



Anti-TMEM106B Antibody (C-Term) at 1:2000 dilution + Mouse brain lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.



## Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing Hela cells stained with AP22247b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22247b, 1:25 dilution) for 60 min at 37°C. The secondary Goat-Anti-Rabbit antibody used was lgG, **DyLight**® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

## TMEM106B Antibody (C-Term) - Background

Involved in dendrite morphogenesis and maintenance by regulating lysosomal trafficking via its interaction with MAP6. May act by inhibiting retrograde transport of lysosomes along dendrites. Required for dendrite branching.

### TMEM106B Antibody (C-Term) - References

Ota T., et al.Nat. Genet. 36:40-45(2004). Suzuki Y., et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases. Scherer S.W., et al.Science 300:767-772(2003). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Hillier L.W., et al.Nature 424:157-164(2003).

### TMEM106B Antibody (C-Term) - Citations

• <u>Cleaved TMEM106B forms amyloid aggregates in central and peripheral nervous systems</u>