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TMED2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13140A

Product Information

Application	WB, IHC-P, E
Primary Accession	Q15363
Other Accession	Q63524, Q9R0Q3, P49020, NP_006806.1
Reactivity	Human
Predicted	Hamster, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32536
Calculated MW	22761
Antigen Region	50-79

Additional Information

Gene ID	10959
Other Names	Transmembrane emp24 domain-containing protein 2, Membrane protein p24A, p24, p24 family protein beta-1, p24beta1, TMED2, RNP24
Target/Specificity	This TMED2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 50-79 amino acids from the N-terminal region of human TMED2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	TMED2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMED2
Synonyms	RNP24

Function	Involved in vesicular protein trafficking. Mainly functions in the early secretory pathway but also in post-Golgi membranes. Thought to act as cargo receptor at the lumenal side for incorporation of secretory cargo molecules into transport vesicles and to be involved in vesicle coat formation at the cytoplasmic side. In COPII vesicle- mediated anterograde transport involved in the transport of GPI- anchored proteins and proposed to act together with TMED10 as their cargo receptor; the function specifically implies SEC24C and SEC24D of the COPII vesicle coat and lipid raft-like microdomains of the ER. Recognizes GPI anchors structural remodeled in the ER by PGAP1 and MPPE1. In COPI vesicle-mediated retrograde transport inhibits the GTPase-activating activity of ARFGAP1 towards ARF1 thus preventing immature uncoating and allowing cargo selection to take place. Involved in trafficking of G protein-coupled receptors (GPCRs). Regulates F2RL1, OPRM1 and P2RY4 exocytic trafficking from the Golgi to the plasma membrane thus contributing to receptor resensitization. Facilitates CASR maturation and stabilization in the early secretory pathway and increases CASR plasma membrane targeting. Proposed to be involved in organization of intracellular membranes such as the maintenance of the Golgi apparatus. May also play a role in the biosynthesis of secreted cargo such as eventual processing.
Cellular Location	Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Cytoplasmic vesicle, COPI-coated vesicle membrane; Single-pass type I membrane protein. Golgi apparatus, cis-Golgi network membrane; Single-pass type I membrane protein. Golgi apparatus, Golgi stack membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endoplasmic reticulum-Golgi intermediate compartment membrane; Single-pass type I membrane protein. Note=Cycles between compartments of the early secretatory pathway

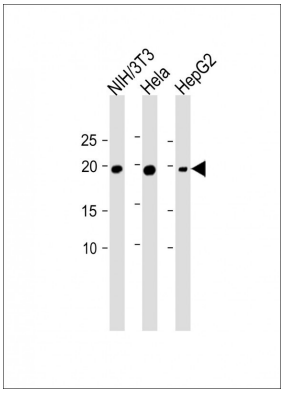
Background

TMED2 could have a role in the budding of coatomer-coated and other species of coated vesicles. It could bind cargo molecules to collect them into budding vesicles.

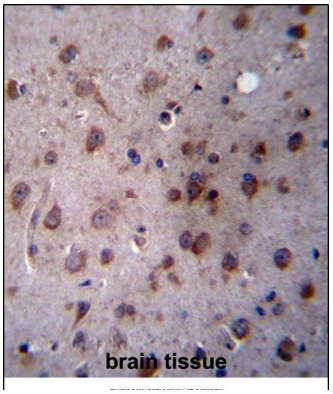
References

Stepanchick, A., et al. Biochem. Biophys. Res. Commun. 395(1):136-140(2010)
Luo, W., et al. J. Biol. Chem. 282(41):30246-30255(2007)
Chen, F., et al. Nature 440(7088):1208-1212(2006)
Breuza, L., et al. J. Biol. Chem. 279(45):47242-47253(2004)
Barr, F.A., et al. J. Cell Biol. 155(6):885-891(2001)

Images



All lanes: Anti-TMED2 Antibody (N-term) at 1:2000 dilution Lane 1: NIH/3T3 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 19 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



TMED2 Antibody (N-term) (Cat. #AP13140a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TMED2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.