

Product Data Sheet

Product Name: Anti- TMED10 antibody, polyclonal

(Transmembrane emp24-like trafficking protein 10)

Catalog Number: 56015

Lot Number: See label on vial

Product Description: This antibody is supplied as 50 ug of affinity purified rabbit IgG in 1X

PBS (pH 7.4) with 0.05% sodium azide.

Immunogen: Rabbit polyclonal anti-TMED10 antibody was raised against a synthetic

peptide corresponding to near the C-terminus of human TMP21 protein

Species Reactivity: Human, Mouse, Rat

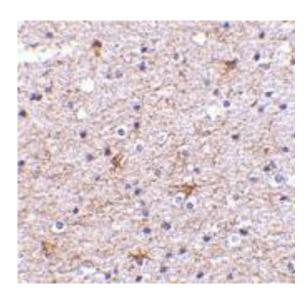
Validation: WB: 1: 500-2,000

IHC: 1: 400 IF: 1: 50

Other applications Not tested

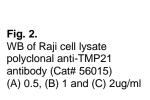
Storage: Store at 4 °C for up to one year.

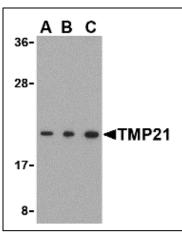
For long term storage, aliquot and freeze. Avoid repeated freezing and thawing.



This product is for *in vitro* research use only.

Fig. 1. IHC of human brain tissue stained with polyclonal anti-TMP21 antibody (Cat#56015)





Target Information:

Official symbol: TMED10

Official full name: Transmembrane emp24-like trafficking protein 10

Alternative Names: 21 kDa transmembrane-trafficking protein, S31III125, Tmp-21-I,

transmembrane protein Tmp21, p23, p24 family protein delta-1, p24delta

Organism: Human

Length: 219 amino acids

Predicted MW: 25.0 kDa

Domains: GOLD domain

Processing: The sequence is further processed into the mature form.

Subunit structure: Predominantly homodimeric and to lesser extent monomeric in

endoplasmic reticulum.

Tissue expression: Ubiquitous.

Subcellular location: Golgi apparatus, cis-Golgi network membrane, trans-Golgi network

membrane, single-pass type I membrane protein, melanosome, endoplasmic reticulum membrane, endoplasmic reticulum-Golgi intermediate compartment membrane, cytoplasmic vesicle, secretory

vesicle membrane. Note: Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Cycles between

compartments of the early secretatory pathway.

Function: Tmp21 is a protein involved in vesicular protein trafficking. Mainly

functions in the early secretory pathway. 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 togther with TMED2 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 involved in the biogenesis of COPI vesicles and vesicle coat recruitment. On Golgi membranes, acts as primary receptor for ARF1-GDP which is involved in COPI-vesicle formation. Increases coatomer-dependent GTPase-activating activity of ARFGAP2. Involved in trafficking of G protein-coupled receptors

ARFGAP2. Involved in trafficking of G protein-coupled receptors (GPCRs). Regulates F2LR1, OPRM1 and P2RY4 exocytic trafficking from the Golgi to the plasma membrane thus contributing to receptor resensitization. Involved in trafficking of amyloid beta A4 protein and soluble APP-beta release (independent of modulation of gamma-secretase activity). As part of the presenilin-dependent gamma-

secretase complex regulates gamma-cleavages of the amyloid beta A4 protein to yield amyloid-beta 40 (Abeta40). Involved in organization of the Golgi apparatus.

Disease association: None identified

Source of target information is from HUGO Gene Nomenclature Committee, UniProt, ExPASy PROSITE.