

Rabbit Anti-TMP21 antibody

SL11262R

Product Name:	TMP21
Chinese Name:	跨膜Transporter21抗体
Alias:	p23; p24 family protein delta 1; p24delta; p24delta1; S31I125; S31III125; TMED 10; TMED10; Tmp 21 I; Tmp 21 I; Transmembrane emp24 domain containing protein 10; Transmembrane emp24-like trafficking protein 10 (yeast); Transmembrane protein Tmp21; Transmembrane trafficking protein 21kD; 1110014C03Rik; 21 kDa transmembrane trafficking protein; MGC102351; TMEDA_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TMP21:101-200/219
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20癈. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 癈.
PubMed:	PubMed
Product Detail:	TMP21 is a member of the EMP24/GP25L/p24 cargo family of proteins that regulates vesicular trafficking in the early secretory pathway. TMP21 is a ubiquitously expressed

single-pass type I membrane protein localizing to the Golgi cisternae and the plasma membrane. It contains one GOLD (Golgi dynamics) domain and participates in protein transport and quality control between the endoplasmic reticulum (ER) and the Golgi complex. In addition, TMP21 is a component of the heteromeric secretase complex (or Presenilin complex) and functions to regulate the ?secretase activity. Two isoforms, namely TMP21-I and TMP21-II, exist for this protein.

Function:

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 together 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 (By similarity). 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 GTPaseactivating activity of 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 presentiin-dependent gammasecretase complex regulates gamma-cleavages of the amyloid beta A4 protein to yield amyloid-beta 40 (Abeta 40). Involved in organization of the Golgi apparatus.

Subunit:

Predominantly homodimeric and to lesser extent monomeric in endoplasmic reticulum. Homodimer and monomer in endoplasmic reticulum-Golgi intermediate compartment and cis-Golgi network. Probably oligomerizes with other members of the EMP24/GP25L family such as TMED2, TMED7 and TMED9. Interacts with TMED2. Associates with the COPI vesicle coat (coatomer); TMED10:TMED2 heterotetramers are proposed to be involved in coatomer association. Interacts (via C-terminus) with COPG1; the interaction involves dimeric TMED10. Interacts with ARF1 (GDP-bound); the interaction probably involves a TMED10 oligomer. Interacts with SEC23A; indicative for an association of TMED10 with the COPII vesicle coat. Interacts with CD59, SEC24B, SEC24C and SEC24D (By similarity). Interacts with MPPE1/PGAP5. Interacts with F2LR1. Interacts with KDELR2; the interaction is disrupted by KDELR2 ligand (By similarity). Found in a complex composed at least of SURF4, TMED2 and TMED10. Associates with the presentlin-dependent gamma-secretase complex.

Subcellular Location:

Golgi apparatus, cis-Golgi network membrane; Single-pass type I membrane protein. Melanosome. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endoplasmic reticulum-Golgi intermediate compartment membrane; Single-pass type I

membrane protein. Cytoplasmic vesicle, secretory vesicle membrane; Single-pass type I membrane protein (By similarity). Cell membrane (By similarity). Golgi apparatus, trans-Golgi network membrane; Single-pass type I membrane protein (By similarity). Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Cycles between compartments of the early secretatory pathway.

Tissue Specificity:

Ubiquitous.

Similarity:

Belongs to the EMP24/GP25L family.

Contains 1 GOLD domain.

SWISS:

P49755

Gene ID:

10972

Database links:

Entrez Gene: 10972Human

Entrez Gene: 68581 Mouse

Entrez Gene: 84599Rat

Omim: 605406Human

SwissProt: P49755Human

SwissProt: Q9D1D4Mouse

SwissProt: Q63584Rat

Unigene: 74137Human

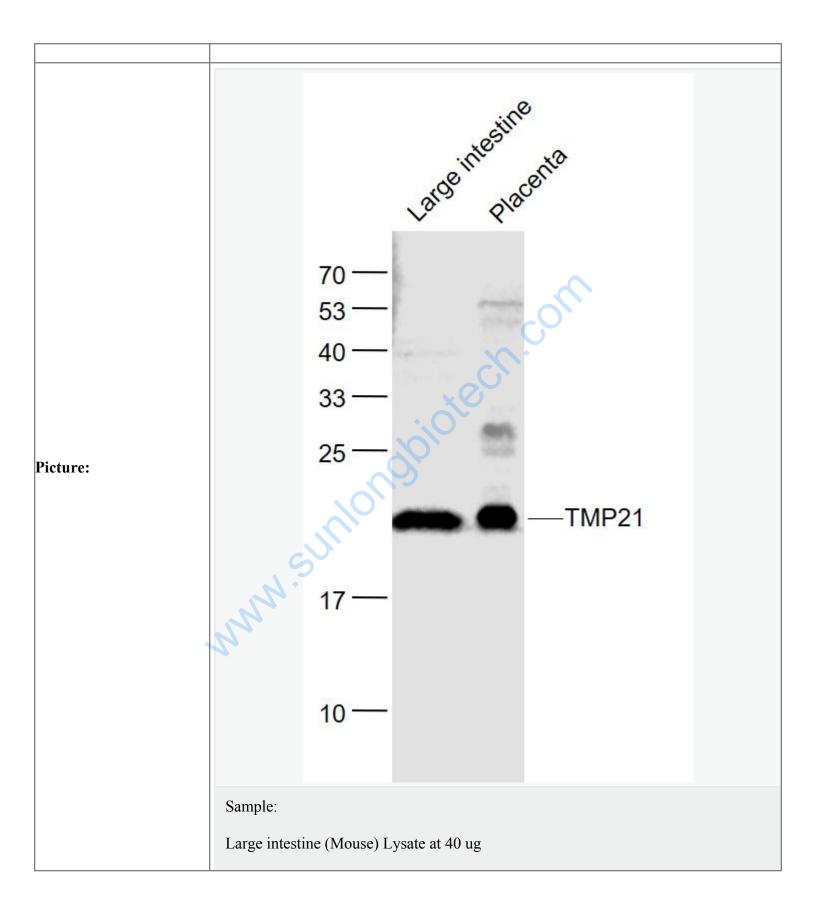
Unigene: 379159Mouse

Unigene: 472063Mouse

Unigene: 8509Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Placenta (Mouse) Lysate at 40 ug

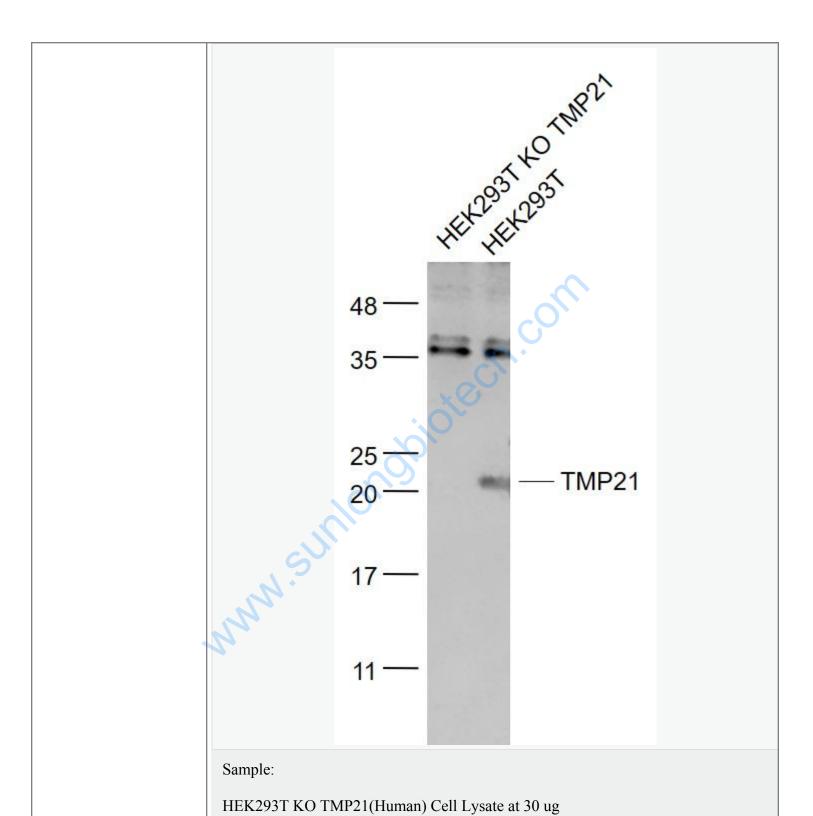
Primary: Anti-TMP21 (SL11262R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 22 kD

Observed band size: 22 kD





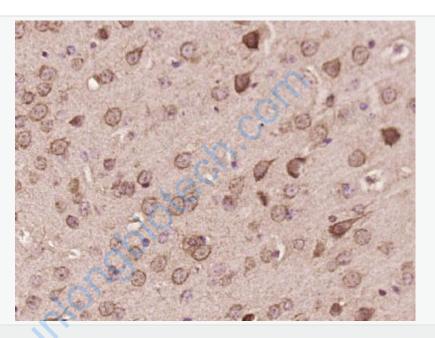
HEK293T(Human) Cell Lysate at 30 ug

Primary: Anti-TMP21 (SL11262R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 22 kD

Observed band size: 22 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TMP21) Polyclonal Antibody, Unconjugated (SL11262R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.