

## **Product datasheet for TA336524**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

#### TMP21 (TMED10) Rabbit Polyclonal Antibody

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Immunohistochemistry: 1:100-1:200, Western Blot: 2 ug/ml, Immunohistochemistry-Paraffin:

1:100-1:200, Knockdown Validated

Reactivity: Human, Mouse, Rat, Bovine, Chicken, Primate, Rabbit

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** A synthetic peptide made to an internal sequence of the human TMP21 protein (within

residues 100-200). [Swiss-Prot# P49755]

Formulation: PBS, 30% glycerol, 0.1% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw

cycles.

**Concentration:** lot specific

**Purification:** Immunogen affinity purified

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 21 kDa

**Gene Name:** transmembrane p24 trafficking protein 10

Database Link: NP 006818

Entrez Gene 68581 MouseEntrez Gene 84599 RatEntrez Gene 10972 Human

P49755





Background:

TMP21 (transmembrane protein Tmp21) is a type I transmembrane protein with large luminal domain belonging to p24 endoplasmic reticulum/Golgi cargo family and play key roles in protein transport, membrane structure organization and secretory pathway. TMP21 is ubiquitously expressed with highest protein levels observed in pancreas and intestines. In addition to its well established role in vesicle formation and cargo transport in ER/Golgi, TMP21 has been implicated in recruitment of small GTPase ADP-ribosylation factor 1 to Golgi apparatus and ADP-ribosylation factor 1-dependent assembly of actin in the Golgi. TMP21 forms a component of presenilin complex at the plasma membranes and modulates gamma -secretase cleavage. The cytoplasmic tails of p24 family interacts with coatomer (major component of coat protein complex I or COP-I), to facilitate transport between ER and Golgi. TMP21 cycles through the early secretory pathway between intermediate and cis-Golgi compartments, and is essential for proper organization of the Golgi apparatus. TMP21 also plays an essential and non-redundant role in earliest stages of mammalian development.

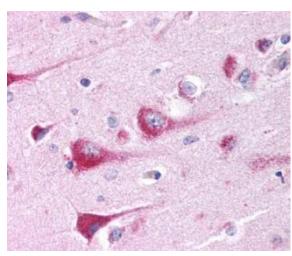
**Synonyms:** p23; P24(DELTA); p24d1; S31I125; S31III125; Tmp-21-I; TMP21

**Note:** This TMP21 antibody is useful for Immunohistochemistry-Paraffin and Western blot analysis

where a band is seen at ~21 kDa.

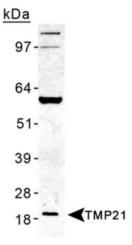
**Protein Families:** Transmembrane

# **Product images:**

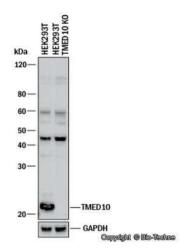


Immunohistochemistry: Tmp21/p23 Antibody TA336524 - TMP21 Antibody TA336524 - Detection of TMP21 in central neurons.





Western Blot: Tmp21/p23 Antibody TA336524 - TMP21 Antibody TA336524 - Detection of TMP21 in human liver lysate.



Knockdown Validated: Tmp21/p23 Antibody TA336524 - Western blot shows lysates of HEK293T human embryonic kidney parental cell line and TMP21/TMED10 knockout (KO) HEK293T cell line. PVDF membrane was probed with 2.0 ug/ml of Rabbit Anti-Human TMP21/TMED10 Polyclonal Antibody (Catalog # TA336524) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog #HAF008). Specific band was detected for TMP21/TMED10 at approximately 25 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in the knockout HEK293T cell line. This experiment was conducted under reducing conditions.