



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C  
#2076

## TMP21 Antibody

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H M Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 19	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P49755	<b>Entrez-Gene Id:</b> 10972
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

TMP21 Antibody detects endogenous levels of total TMP21 protein.

### Species predicted to react based on 100% sequence homology

Rat

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues of human TMP21. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

TMP21, a type I transmembrane protein, is a member of the p24 cargo protein family, which is highly enriched in the ER, the Golgi and coat protein (COP) I and II transport vesicles (1,2). TMP21 is involved in protein transport and vesicular targeting. In particular, TMP21 influences APP trafficking by stabilizing nascent APP. The absence of TMP21 leads to enhanced maturation and cell surface accumulation of APP (3). In addition, TMP21 is a non-essential component of the  $\gamma$ -secretase complex with the potential to modulate  $\gamma$ -secretase mediated cleavage and A $\beta$  production without having an effect on  $\epsilon$ -secretase activity (4).

### Background References

1. Blum, R. et al. (1996) *J Biol Chem* 271, 17183-9.
2. Blum, R. et al. (1999) *J Cell Sci* 112 ( Pt 4), 537-48.
3. Vetrivel, K.S. et al. (2007) *Mol Neurodegener* 2, 4.
4. Chen, F. et al. (2006) *Nature* 440, 1208-12.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **Mk:** Monkey

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