



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# TMP21 (m2): 293T Lysate: sc-124193

## BACKGROUND

TMP21 (21 kDa transmembrane-trafficking protein), also known as TMED10 (transmembrane emp24 domain-containing protein 10), Tmp-21, S311125, S3111125, p23 or p24 $\delta$ , 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  $\gamma$ -secretase activity. Two isoforms, namely TMP21-I and TMP21-II, exist for this protein.

## REFERENCES

- Sherrington, R., et al. 1995. Cloning of a gene bearing missense mutations in early-onset familial Alzheimer's disease. *Nature* 375: 754-760.
- Blum, R., et al. 1996. TMP21 and p24A, two type I proteins enriched in pancreatic microsomal membranes, are members of a protein family involved in vesicular trafficking. *J. Biol. Chem.* 271: 17183-17189.
- Blum, R., et al. 1999. Intracellular localization and *in vivo* trafficking of p24A and P23. *J. Cell Sci.* 112: 537-548.
- Hörner, J., et al. 1999. A comparative study of rat and human TMP21 (P23) reveals the pseudogene-like features of human TMP21-II. *DNA Seq.* 10: 121-126.
- Baker, L.A. and Gomez, R.A. 2000. TMP21-I, a vesicular trafficking protein, is differentially expressed during induction of the ureter and metanephros. *J. Urol.* 164: 562-566.
- Barr, F.A., et al. 2001. Golgi matrix proteins interact with p24 cargo receptors and aid their efficient retention in the Golgi apparatus. *J. Cell Biol.* 155: 885-891.
- Wang, H. and Kazanietz, M.G. 2002. Chimaerins, novel non-protein kinase C phorbol ester receptors, associate with TMP21-I (P23): evidence for a novel anchoring mechanism involving the chimaerin C1 domain. *J. Biol. Chem.* 277: 4541-4550.
- Chen, F., et al. 2006. TMP21 is a presenilin complex component that modulates  $\gamma$ -secretase but not  $\epsilon$ -secretase activity. *Nature* 440: 1208-1212.
- Vetrivel, K.S., et al. 2007. Dual roles of the transmembrane protein p23/TMP21 in the modulation of amyloid precursor protein metabolism. *Mol Neurodegener.* 2: 4.

## CHROMOSOMAL LOCATION

Genetic locus: Tmed10 (mouse) mapping to 12 D2.

## PRODUCT

TMP21 (m2): 293T Lysate represents a lysate of mouse TMP21 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

TMP21 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TMP21 antibodies. Recommended use: 10-20  $\mu$ l per lane.

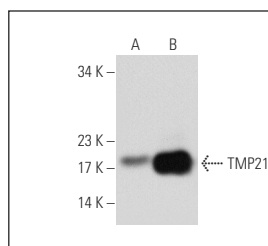
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TMP21 (A-7): sc-137003 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TMP21 expression in TMP21 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

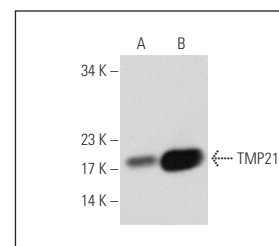
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



TMP21 (A-7): sc-137003. Western blot analysis of TMP21 expression in non-transfected: sc-117752 (A) and mouse TMP21 transfected: sc-124193 (B) 293T whole cell lysates.



TMP21 (F-7): sc-137004. Western blot analysis of TMP21 expression in non-transfected: sc-117752 (A) and mouse TMP21 transfected: sc-124193 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.