

Datasheet for 600-401-FK4**TMP21 Antibody****Overview**

Description:	Anti-TMP21 (RABBIT) Antibody - 600-401-FK4
Item No.:	600-401-FK4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	TMP21 is a ubiquitously expressed protein that is involved in vesicular targeting and protein transport. More recent experiments have shown that it is also a component in the presenilin complex and modulates the gamma-secretase but not the epsilon-secretase cleavage activity of the amyloid precursor protein. The presenilin complex is composed of the proteins APH1, nicastrin, and PEN2 in addition to presenilin-1. Together, these proteins cleave the amyloid precursor protein at what is known as the gamma- and epsilon-sites and can lead to the accumulation of the Abeta cleavage product that is associated with Alzheimer's disease. Co-immunoprecipitation experiments using antibodies against these proteins also yielded TMP21 indicating that TMP21 may play a role in the regulation of this complex. Suppression of TMP21 expression by siRNA in transfected cells caused increased gamma-secretase activity but not epsilon-secretase activity, and increased Abeta production, demonstrating that TMP21 can modulate gamma-secretase activity.
Synonyms:	TMP21 Antibody, p23, TMP21, S31I125, Tmp-21-I, S31III125, P24(DELTA), Transmembrane emp24 domain-containing protein 10, 21 kDa transmembrane-trafficking protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TMED10
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TMP21 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid synthetic peptide from near the C-terminus of human TMP21.
Purity/Specificity:	Anti-TMP21 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TMP21 from other sources has not been determined.
Relevant Links:	• UniProtKB - P49755 • GenelD - 10972 • NCBI - NP_006818.3

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-TMP21 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 25 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

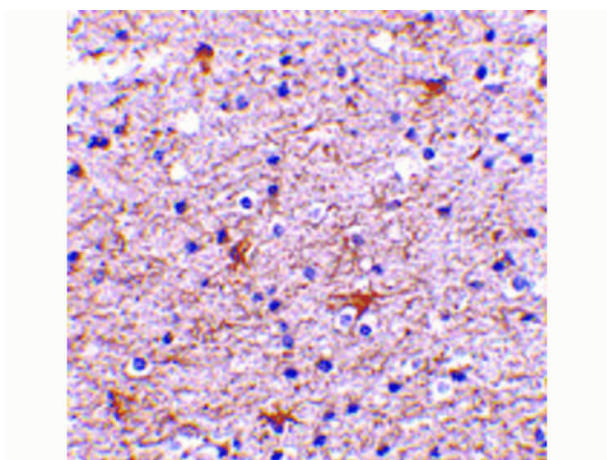
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

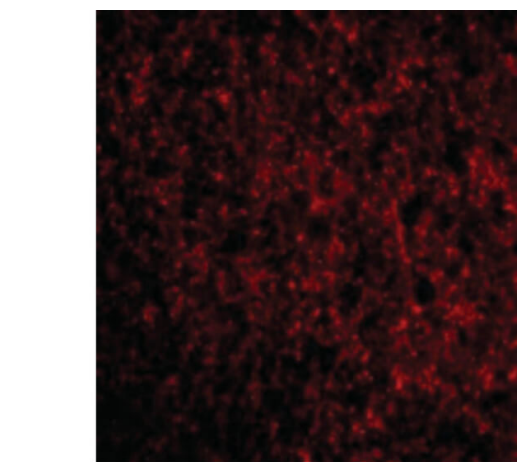
Expiration: Expiration date is one (1) year from date of receipt.

Images



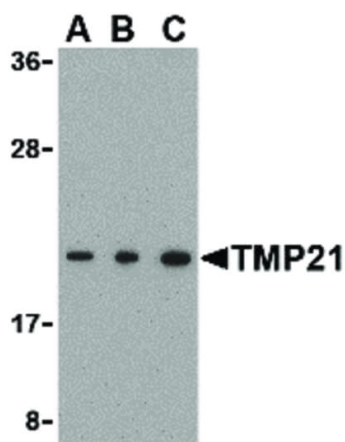
Immunohistochemistry

Immunohistochemistry of TMP21 antibody. Tissue: human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TMP21 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TMP21 is located in the cell membrane, endosome, golgi apparatus, and lysosome. Staining: TMP21 is stained with toluidine blue.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of TMP21 antibody. Cell Type: human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TMP21 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TMP21 is located in the cell membrane, endosome, golgi apparatus, and lysosome. Staining: TMP21 as red fluorescent signal.

**Western Blot**

Western Blot of TMP21 antibody in Raji cell lysate. Lane A: TMP21 antibody at 0.5 $\mu\text{g/mL}$. Lane B: TMP21 antibody at 1 $\mu\text{g/mL}$. Lane C: TMP21 antibody at 2 $\mu\text{g/mL}$. Load: 35 μg per lane. Primary antibody: TMP21 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 36 kDa, 24 kDa for TMP21. Other band(s): TMP21 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.