

Datasheet for 600-401-FH8**TMEM18 Antibody****Overview**

Description:	Anti-TMEM18 (RABBIT) Antibody - 600-401-FH8
Item No.:	600-401-FH8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Recent studies have examined how overexpression of certain genes enhances the tropism of neural stem cells (NSCs) for gliomas. Overexpression of Transmembrane protein 18 (TMEM18) provides NSCs and neural precursors an increased migration capacity towards glioblastoma cells in vitro and in the rat brain, while functional inactivation of the gene resulted in an almost complete loss of migration activity, suggesting that TMEM18 could be a potential target in NSC-based glioma therapy. Other recent results suggest that among others, the TMEM18 loci is associated with higher than normal body mass index (BMI) and obesity, indicating there may be a CNS-related role in predisposition to obesity. Multiple isoforms of TMEM18 are known to exist.
Synonyms:	TMEM18 Antibody, Transmembrane protein 18
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TMEM18
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TMEM18 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the C-terminus of human TMEM18.

Purity/Specificity:	Anti-TMEM18 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TMEM18 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q96B42 • GeneID - 129787 • NCBI - NP_690047.2

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-TMEM18 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 16 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 - 1:10000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-1 µg/mL

Formulation

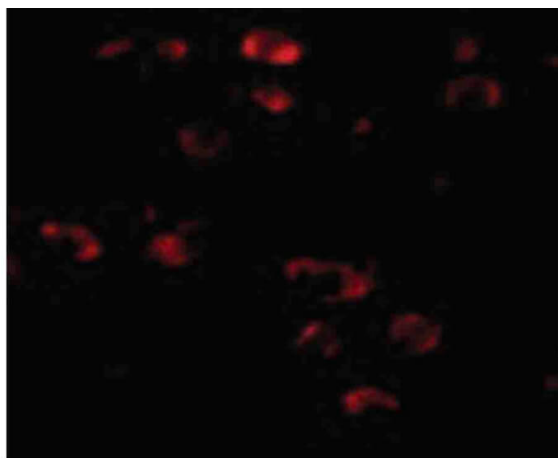
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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.

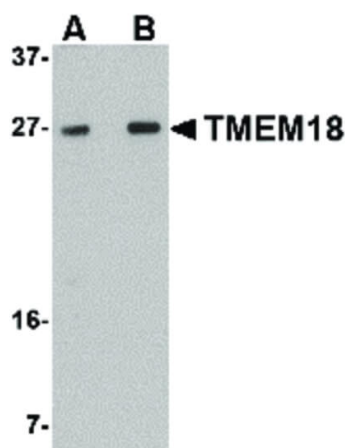
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy of TMEM18 antibody.
 Tissue: mouse brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TMEM18 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: TMEM18 is a single-pass membrane protein. Staining: TMEM18 as red fluorescent signal.



Western Blot

Western Blot of TMEM18 antibody. Lane 1: rat brain lysate with TMEM18 antibody at 0.5 µg/mL. Lane 2: rat brain lysate with TMEM18 antibody at 1 µg/mL. Load: 35 µg per lane. 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: 31.1 kDa, 27 kDa for TMEM18. Other band(s): TMEM18 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.