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Datasheet for 600-401-FJ7

TMEM38B Antibody

Overview

Description:	Anti-TMEM38B (RABBIT) Antibody - 600-401-FJ7
Item No.:	600-401-FJ7
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	TMEM38A and TMEM38B are two recently identified trimeric intracellular cation (TRIC) channel subtypes. TMEM38B is expressed in most mammalian tissues, while TMEM38A is preferentially expressed in excitable tissues such as striated muscle and brain. Mice deficient in both TMEM38A and TMEM38B suffer embryonic cardiac failure; the cardiac myocytes display severe dysfunction in SR Ca2+ handling, weakened Ca2+ release, and reduced K+ permeability indicating that the TRIC cation channels are likely to act as counter-ion channels that function in synchronization with Ca2+ release from intracellular stores. Mice that were lacking only TMEM38B however, die shortly after birth due to respiratory failure and have lungs exhibiting severe histological defect and ultrastructural abnormalities in their alveolar type II epithelial cells, indicating that TMEM38B are essential for perinatal lung maturation. Other experiments have shown that TMEM38A and TMEM38B can act with junctophilin proteins to support efficient ryanodine receptor-mediated Ca2+ release in muscle cells.
Synonyms:	TMEM38B Antibody, OI14, TRICB, TRIC-B, C9orf87, D4Ertd89e, bA219P18.1, Trimeric intracellular cation channel type B, Transmembrane protein 38B
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TMEM38B
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TMEM38B antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide from near the C-terminus of human TMEM38B.
Purity/Specificity:	Anti-TMEM38B Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TMEM38B from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9NVV0 • GeneID - 55751 • NCBI - NP_060582.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-TMEM38B 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 33 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:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1-2 µg/mL

Formulation

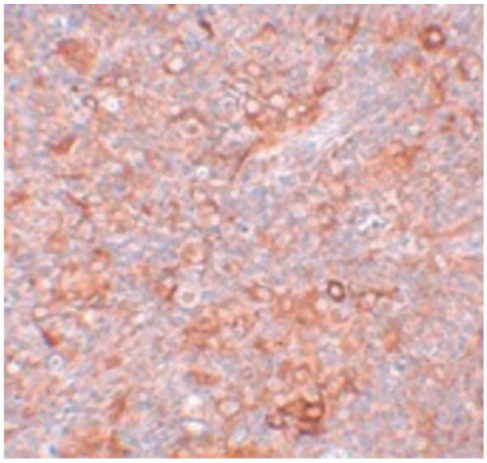
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

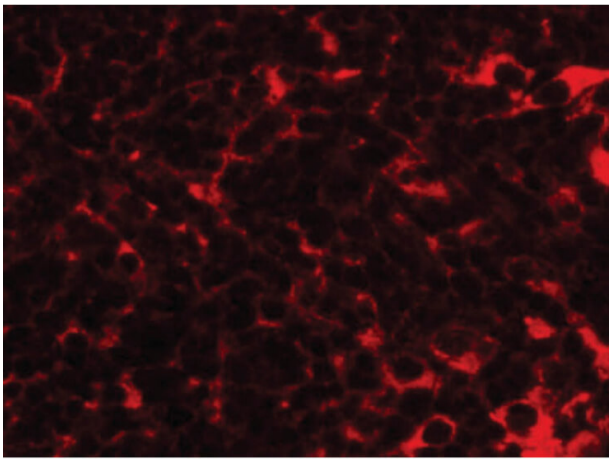
Shipping Condition:	Dry Ice

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.

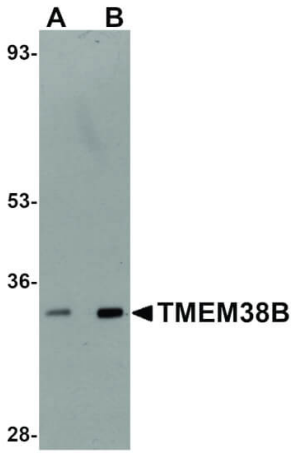
Images



Immunohistochemistry
Immunohistochemistry of TMEM38B antibody. Tissue: mouse thymus tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TMEM38B antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TMEM38B is a membrane protein. Staining: TMEM38B as precipitated brown signal with blue nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of TMEM38B antibody. Tissue: Mouse thymus tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TMEM38B 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: TMEM38B is a membrane protein. Staining: TMEM38B as red fluorescent signal.



Western Blot

Western Blot of TMEM38B antibody. Lane 1: Rat thymus tissue lysate with TMEM38B antibody at 1 µg/mL. Lane 2: Rat thymus tissue lysate with TMEM38B antibody at 2 µg/mL. 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: 33 kDa, 33 kDa for TMEM38B. Other band(s): TMEM38B 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.