

Datasheet for 200-301-W85**TASK1 Potassium Channel Antibody****Overview**

Description:	Anti-TASK1 Potassium Channel (MOUSE) Monoclonal Antibody - 200-301-W85
Item No.:	200-301-W85
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	K ⁺ channels are divided into three subclasses reflecting the number of transmembrane segments (TMS), which are designated 6TMS, 4TMS and 2TMS. Members of the 4TMS class contain two distinct pore regions and include TWIK, TREK, TRAAK and TASK. TASK channels are highly sensitive to external pH in the physiological range. TASK-1 is expressed in brain and in rat heart, with high levels of expression in the right atrium. TASK-2, mainly expressed in kidney, is localized in cortical distal tubules and collecting ducts, suggesting a role in renal K ⁺ transport. TASK-3 from rat cerebellum shares 54% identity with TASK-1, but less than 30% identity with TASK-2 and other tandem pore K ⁺ channels. Anti-TASK1 Potassium Channel Antibody is ideal for research in Neuroscience, particularly studies concerning the dopaminergic neuron and melatonin signaling.
Synonyms:	Potassium channel subfamily K member 3, KCNK3, Acid sensitive potassium channel protein TASK 1, Cardiac two pore background K(+) channel, cTBAK 1, K2p3.1, KCNK9, OAT1, potassium channel subfamily K member 3, rTASK, TASK 1, TBAK1
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S374-48
Format:	IgG2b

Target Details

Gene Name:	Kcnk3
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Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-TASK1 Potassium Channel Antibody was produced by repeated immunization of mice with a fusion protein containing amino acids 251-411 of rat TASK1.
Purity/Specificity:	Anti-TASK1 Potassium Channel Antibody was purified from concentrated tissue culture supernate by Protein G chromatography. BLAST analysis suggests that it is 96% identical to mouse, 76% identical to human, and <30% identical to TASK3.
Relevant Links:	• NCBI - NP_203694 • UniProtKB - O54912 • GeneID - 29553

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-TASK1 Potassium Channel Antibody is suitable for Western Blots, Immunohistochemistry and Immunocytochemistry. Expect a band approximately ~50kDa on specific lysates or tissues. Does not cross react with TASK3. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

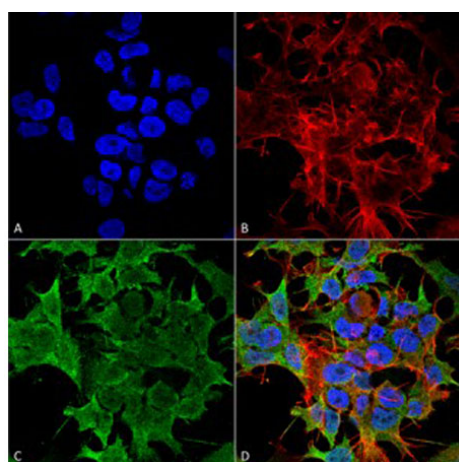
Shipping & Handling

Shipping Condition:	Wet 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



Immunofluorescence Microscopy

Immunofluorescence of Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody.

Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human.

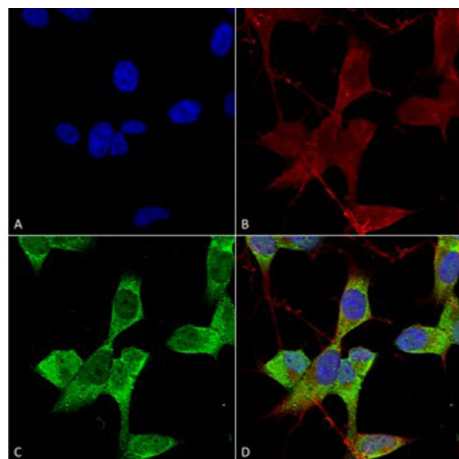
Fixation: 4% Formaldehyde for 15 min at RT.

Primary Antibody: Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody at 1:100 for 60 min at RT.

Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT.

Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT.

Localization: Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) TASK1 Potassium Channel Antibody. (D) Composite.



Immunofluorescence Microscopy

Immunofluorescence of Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody.

Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human.

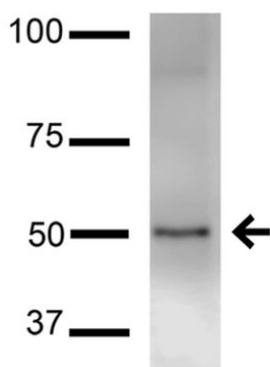
Fixation: 4% PFA for 15 min.

Primary Antibody: Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody at 1:50 for overnight at 4°C.

Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT.

Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT.

(A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) TASK1 Potassium Channel Antibody (D) Composite.

**Western Blot**

Western Blot of Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody.

Load: 15 µg. Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat brain membrane.

Block: 2% BSA and 2% Skim Milk in 1X TBST.

Primary Antibody: Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody at 1:1000 for 16 hours at 4°C.

Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT.

Color Development: ECL solution for 6 min at RT.

Predicted/Observed Size: ~50 kDa.

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.