

TASK1 Potassium Channel Antibody
TASK1 Potassium Channel Antibody, Clone S374-48
Catalog # ASM10305

Specification

TASK1 Potassium Channel Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	O54912
Other Accession	NP_203694.1
Host	Mouse
Isotype	IgG2b
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description

Mouse Anti-Rat TASK1 Potassium Channel Monoclonal IgG2b

Target/Specificity

Detects ~50kDa. Does not cross-react with TASK3.

Other Names

Potassium channel subfamily K member 3 Antibody, KCNK3 Antibody, Acid sensitive potassium channel protein TASK 1 Antibody, Cardiac two pore background K(+) channel Antibody, cTBAK 1 Antibody, K2p3.1 Antibody, KCNK9 Antibody, OAT1 Antibody, potassium channel subfamily K member 3 Antibody, rTASK Antibody, TASK 1 Antibody, TBAK1 Antibody, TWIK related acid sensitive K+ channel Antibody, Two pore potassium channel KT3.1 Antibody, Two pore K(+) channel KT3.1 Antibody

Immunogen

Fusion protein amino acids 251-411 (cytoplasmic C-terminus) of rat Acid-sensitive potassium channel protein TASK or TASK1. Mouse: 96% identity (156/161 amino acids identical). Human: 76% identity (163/161 amino acids identical). <30% identity with TASK3.

Purification

Protein G Purified

Storage

-20°C

Storage Buffer

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature

Blue Ice or 4°C

Certificate of Analysis

1 µg/ml of SMC-473 was sufficient for detection of TASK1 Potassium Channel in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

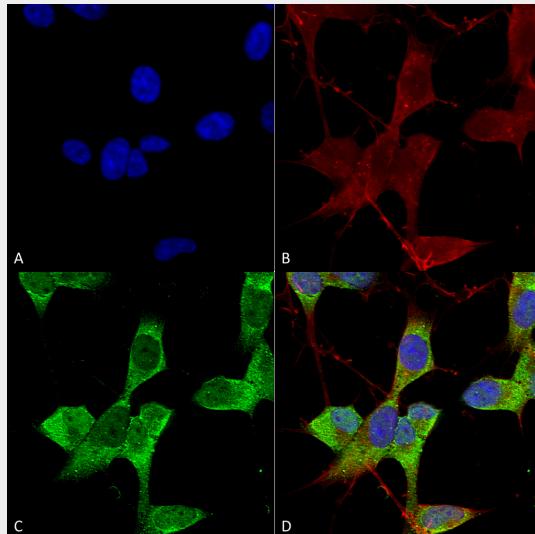
Membrane

TASK1 Potassium Channel Antibody - Protocols

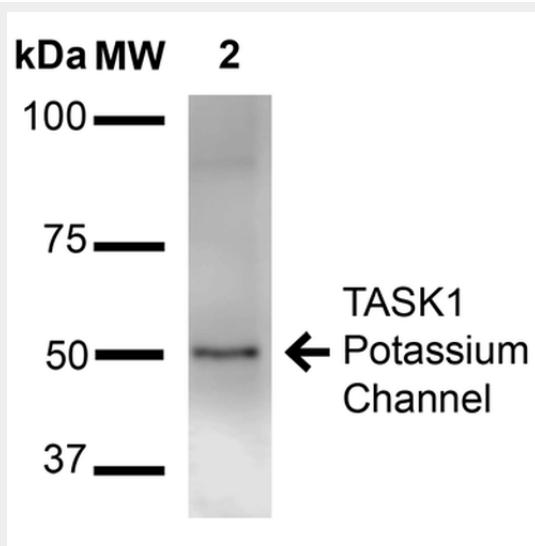
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TASK1 Potassium Channel Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody, Clone N374/48 (ASM10305). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody (ASM10305) at 1:50 for overnight at 4°C with slow rocking. 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 analysis of Rat Brain Membrane showing detection of ~50 kDa TASK1 Potassium Channel protein using Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody, Clone N374/48 (ASM10305). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat brain membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-TASK1 Potassium Channel Monoclonal Antibody (ASM10305) 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.

TASK1 Potassium Channel Antibody - 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.