

Datasheet for 200-301-G56**TRPC7 Antibody****Overview**

Description:	Anti-TRPC7 (MOUSE) Monoclonal Antibody - 200-301-G56
Item No.:	200-301-G56
Size:	100 µg
Applications:	IF, IHC, IP, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	Transient receptor potential cation channel, subfamily C, member 7, also known as TRPC7, is a non-selective cation channel that is directly activated by DAG. TrpC7 shows constitutive activity and susceptibility to negative regulation by extracellular Ca ²⁺ . Because of this, TrpC7 plays an important role in the Ca ²⁺ signaling pathway. TrpC7 is also expressed abundantly in the heart, and combined with its ability to act as a Ca ²⁺ channel, TrpC7 might contribute to the process of heart failure.
Synonyms:	TRP7, KNP3, TRPM2, transient receptor potential cation channel subfamily C member 7, Transient receptor protein 7
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	N64A/36
Format:	IgG1

Target Details

Gene Name:	TRPC7
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	TrpC7 Antibody was produced in mice by repeated immunizations raised against a synthetic peptide corresponding to a near c-terminus region of human TrpC7.

Purity/Specificity: Anti-TrpC7 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with TrpC7 from human, mouse, and rat based on 100% homology with the immunizing sequence. Cross-reactivity with TrpC7 from other sources has not been determined. Ion Channels research.

Relevant Links:

- [NCBI - NP_065122.1](#)
- [GeneID - 57113](#)
- [UniProtKB - Q9HCX4](#)

Application Details

Tested Applications: IF, IHC, IP, WB

Application Note: Anti-TrpC7 Antibody is tested for use in WB, IHC-P, IF, and IP. Expect a band approximately ~100kDa on specific lysates. 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.

IF: 1:100

IHC: 1:1000

IP: User Optimized

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: 0.09% (w/v) Sodium Azide

Stabilizer: 50% (v/v) Glycerol

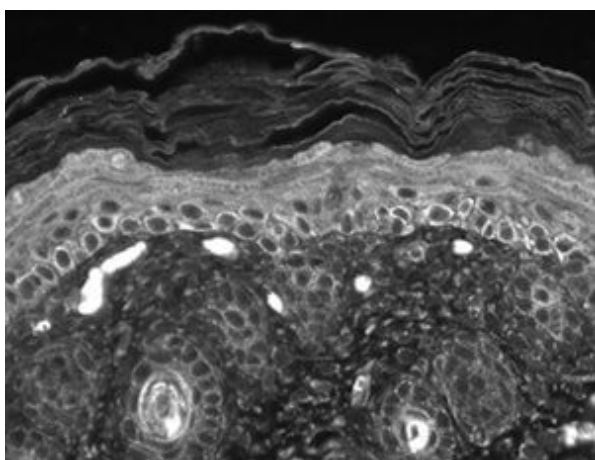
Shipping & Handling

Shipping Condition: Wet 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.

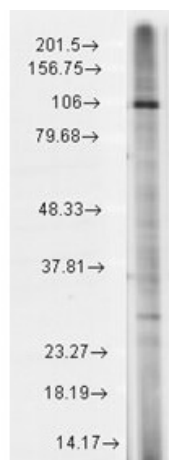
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of mouse anti-TrpC7 antibody.
 Tissue: Mouse Back skin sections. Fixation: N/A. Antigen Retrieval: not required. Primary Antibody: TrpC7 antibody at 1 µg/mL for 1h at RT. Secondary antibody: Peroxidase mouse secondary at 1:10,000 for 45 min at RT. Localization: Cell Membrane. Staining: TrpC4 as white signal.



Western Blot

Western Blot of mouse anti-TRPC7 antibody. Lane 1: Rat brain membrane lysates. Primary antibody: TrpC7 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 99.5kDa/100kD. Other band(s): none.

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.