

TrpC7 Antibody
TRPC7 Antibody, Clone S64A-36
Catalog # ASM10219

Specification

TrpC7 Antibody - Product Information

Application	IHC, WB
Primary Accession	O9HCX4
Other Accession	NP_065122.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description

Mouse Anti-Human TrpC7 Monoclonal IgG1

Target/Specificity

Detects ~100kDa.

Other Names

TRP7 Antibody, KNP3 Antibody, TRPM2 Antibody, transient receptor potential cation channel subfamily C member 7 Antibody

Immunogen

Synthetic peptide amino acids 845-862 of human TRPC7

Purification

Protein G Purified

Storage **-20°C**

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

Certificate of Analysis

1 µg/ml of SMC-343 was sufficient for detection of TrpC7 in 10 µg of rat brain lysate by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

Membrane

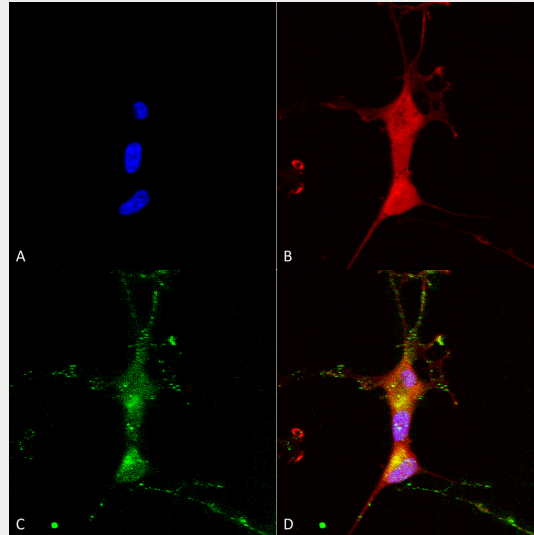
TrpC7 Antibody - Protocols

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

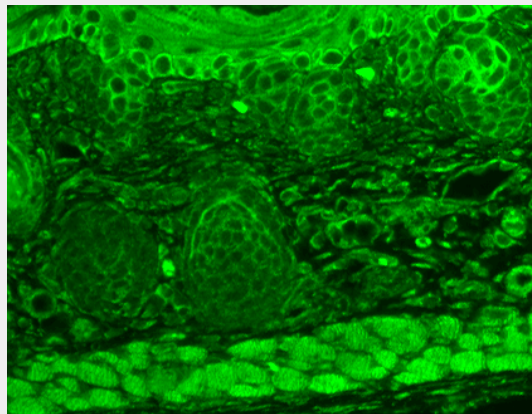
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

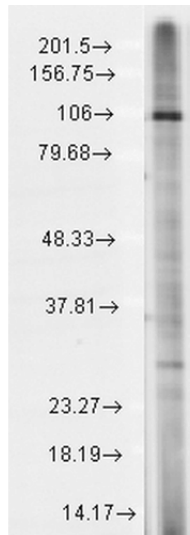
TrpC7 Antibody - Images



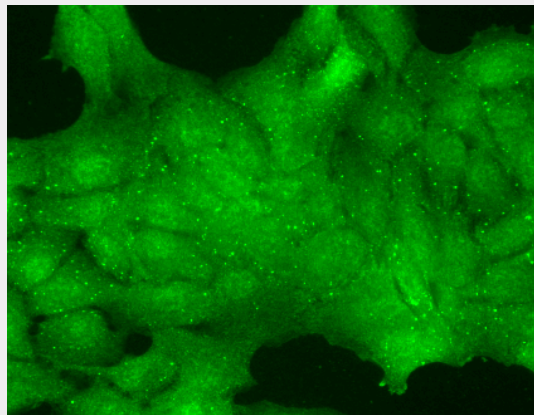
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TrpC7 Monoclonal Antibody, Clone N64A/36 (ASM10219). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-TrpC7 Monoclonal Antibody (ASM10219) at 1:100 for overnight at 4°C with 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) TrpC7 Antibody (D) Composite.



Immunohistochemistry analysis using Mouse Anti-TrpC7 Monoclonal Antibody, Clone N64A/36 (ASM10219). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-TrpC7 Monoclonal Antibody (ASM10219) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Everything.



Western Blot analysis of Rat brain membrane lysate showing detection of TrpC7 protein using Mouse Anti-TrpC7 Monoclonal Antibody, Clone N64A/36 (ASM10219). Load: 15 μ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-TrpC7 Monoclonal Antibody (ASM10219) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TrpC7 Monoclonal Antibody, Clone N64A/36 (ASM10219). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C . Primary Antibody: Mouse Anti-TrpC7 Monoclonal Antibody (ASM10219) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Nuclear staining .

TrpC7 Antibody - 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 (1). 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 (2).

TrpC7 Antibody - References

1. Numaga T., Wakamori M., and Mori Y. (2007) *Handb Exp Pharmacol.* 179: 143-151.
2. Satoh S., et al. (2007) *Mol Cell Biochem.* 294(1-2): 205-215.