

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

**Specification**

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**TrpC7 Antibody - Product Information**

Application	<b>IHC, WB</b>
Primary Accession	<a href="#">O9HCX4</a>
Other Accession	<a href="#">NP_065122.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**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

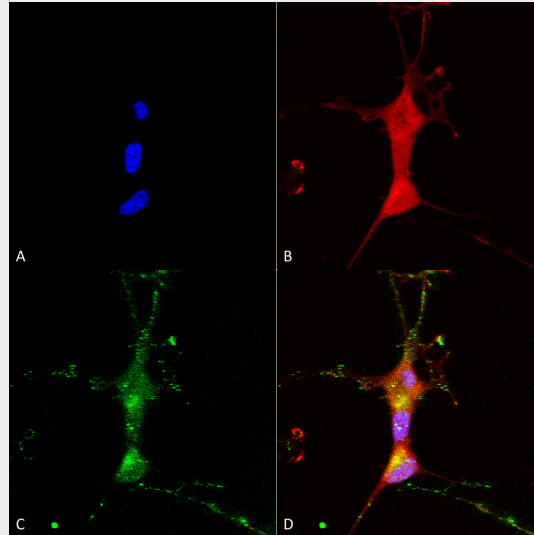
**TrpC7 Antibody - Protocols**

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

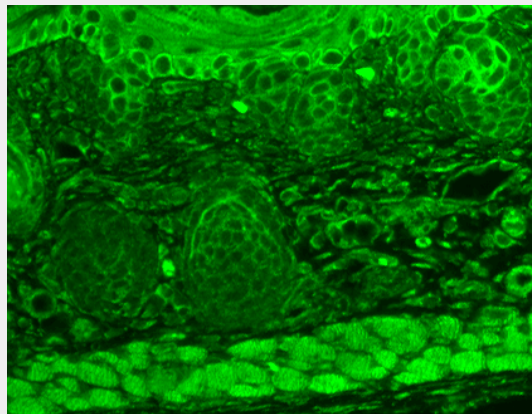
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

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

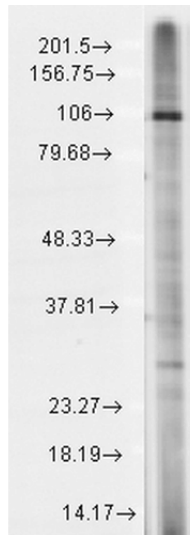
### TrpC7 Antibody - Images



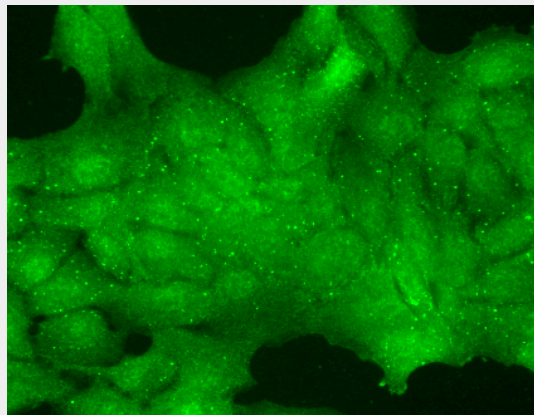
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TrpC7 Monoclonal Antibody, Clone N64A/36 (ASM10219). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-TrpC7 Monoclonal Antibody (ASM10219) at 1:100 for overnight at 4°C with 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  $\mu$ 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  $-20^{\circ}\text{C}$ . 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  $\text{Ca}^{2+}$ . Because of this, TrpC7 plays an important role in the  $\text{Ca}^{2+}$  signaling pathway (1). TrpC7 is also expressed abundantly in the heart, and combined with its ability to act as a  $\text{Ca}^{2+}$  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.