

**TrpM7 Antibody**  
**TRPM7 Antibody, Clone S74-25**  
**Catalog # ASM10194**

**Specification**

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**TrpM7 Antibody - Product Information**

Application	<b>IHC, WB</b>
Primary Accession	<a href="#">O923J1</a>
Other Accession	<a href="#">NP_001157797.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Mouse TrpM7 Monoclonal IgG1

**Target/Specificity**

Detects ~220kDa. No cross-reactivity against TrpM6.

**Other Names**

CHAK antibody, CHAK1 antibody, Channel kinase 1 antibody, Channel-kinase 1 antibody, Long transient receptor potential channel 7 antibody, LTrpC-7 antibody, LTRPC7 antibody, Transient receptor potential cation channel subfamily M member 7 antibody, TRP PLIK antibody, TRPM7 antibody, TRPM7\_HUMAN antibody

**Immunogen**

Fusion protein amino acids 1817-1863 (C- terminus) of mouse TrpM7

**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-316 was sufficient for detection of TrpM7 in 10 µg of COS cell lysate transiently transfected with TrpM7 by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Membrane

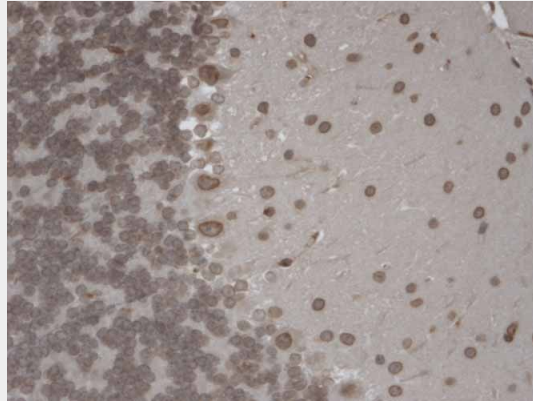
**TrpM7 Antibody - Protocols**

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

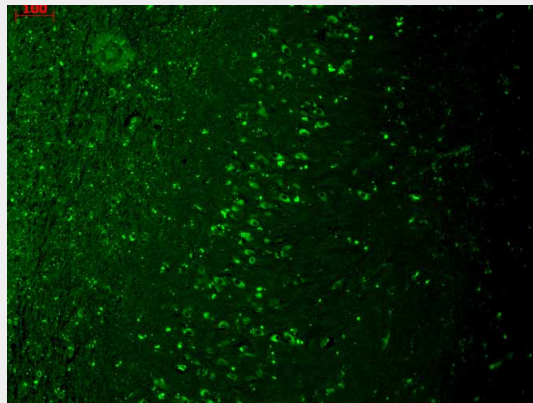
- [Western Blot](#)

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

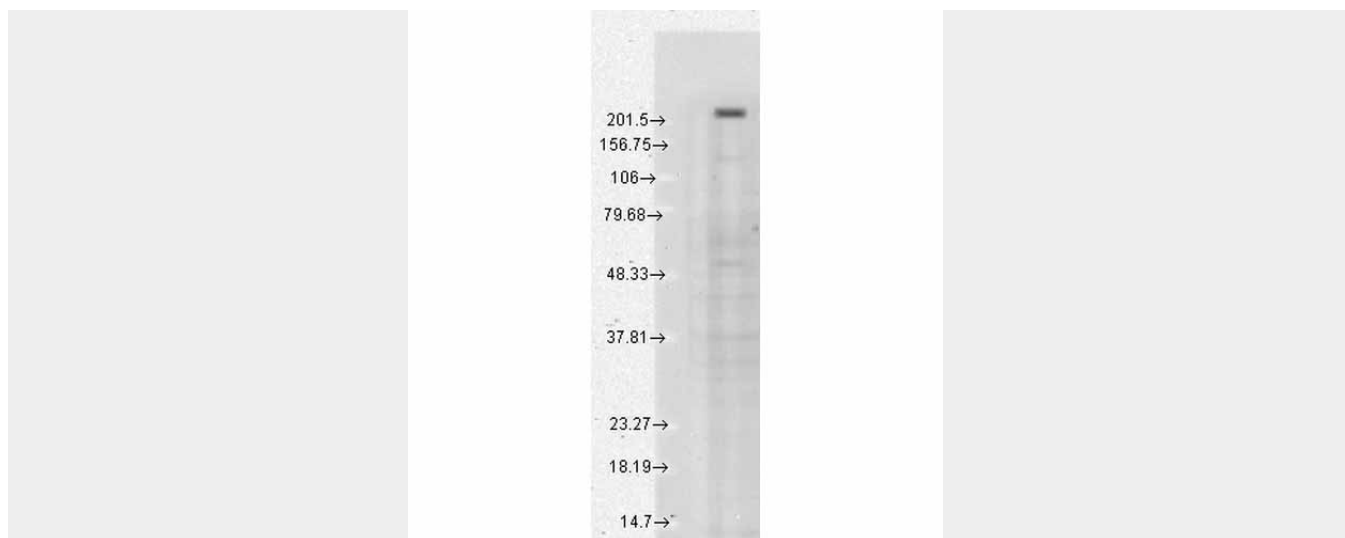
### TrpM7 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-TrpM7 Monoclonal Antibody, Clone S74-25 (ASM10194). Tissue: Brain Slice. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-TrpM7 Monoclonal Antibody (ASM10194) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500  $\mu$ l for 5 minutes at RT. Localization: Nuclear staining of both neurons and glia.



Immunohistochemistry analysis using Mouse Anti-TrpM7 Monoclonal Antibody, Clone S74-25 (ASM10194). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-TrpM7 Monoclonal Antibody (ASM10194) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Western Blot analysis of Human Cell lysates showing detection of TrpM7 protein using Mouse Anti-TrpM7 Monoclonal Antibody, Clone S74-25 (ASM10194). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-TrpM7 Monoclonal Antibody (ASM10194) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

#### **TrpM7 Antibody - Background**

TRPs, mammalian homologs of the *Drosophila* transient receptor potential (*trp*) protein, are ion channels that are thought to mediate capacitative calcium entry into the cell. TRP-PLIK is a protein that is both an ion channel and a kinase. As a channel, it conducts calcium and monovalent cations to depolarize cells and increase intracellular calcium. As a kinase, it is capable of phosphorylating itself and other substrates. The kinase activity is necessary for channel function, as shown by its dependence on intracellular ATP and by the kinase mutants (1, 2).

#### **TrpM7 Antibody - References**

1. Brauchi S., Krapivinsky G., Krapivinsky L., Clapham D.E. (2008) Proc Natl Acad Sci USA. 105(24): 8304-8308.
2. Numata T, Okada Y. (2008) J Biol Chem. 283(22): 15097-15103.