

**NALCN Antibody**  
**NALCN Antibody, Clone S187-7**  
**Catalog # ASM10251****Specification**

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**NALCN Antibody - Product Information**

Application	ICC/IF, WB
Primary Accession	<a href="#">Q6Q760</a>
Other Accession	<a href="#">NP_705894.1</a>
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

**Description**

Mouse Anti-Rat NALCN Monoclonal IgG1

**Target/Specificity**

Detects ~200kDa.

**Other Names**

VGCNL1 Antibody, Canlon Antibody, Sodium leak channel non-selective protein Antibody, Voltage gated channel-like protein 1 Antibody, A530023G15Rik Antibody, bA430M15.1 Antibody, FLJ23913 Antibody, FLJ44659 Antibody, FLJ44764 Antibody, Four repeat voltage gated ion channel Antibody, MGC74524 Antibody, Putative 4 repeat voltage gated ion channel Antibody, Sodium leak channel non-selective protein Antibody

**Immunogen**

Fusion protein amino acids 1659-1738 (cytoplasmic C-terminus) of rat NALCN

**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-417 was sufficient for detection of NALCN in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Membrane

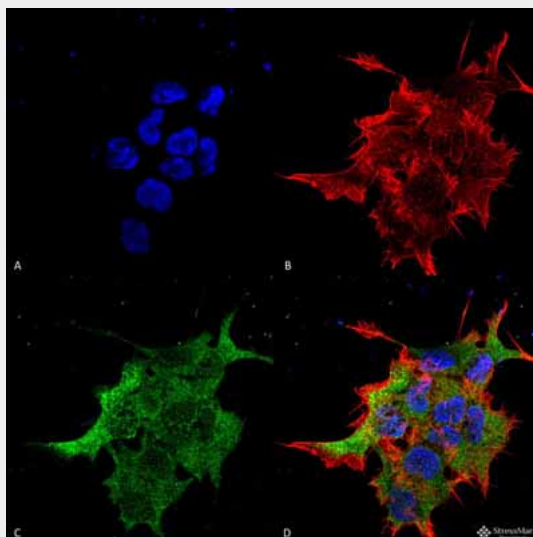
**NALCN Antibody - Protocols**

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

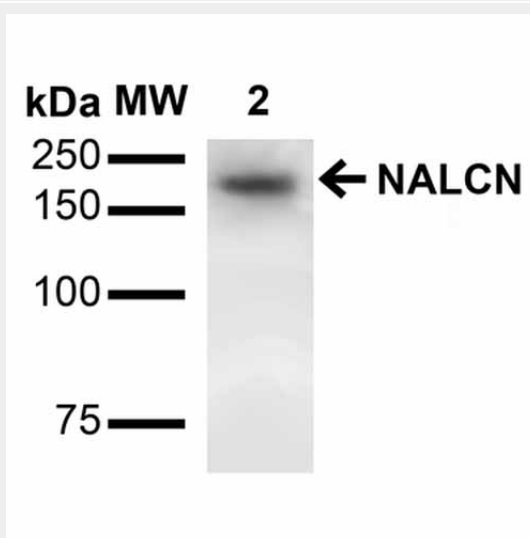
- [Western Blot](#)

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

## NALCN Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NALCN Monoclonal Antibody, Clone S187-7 (ASM10251). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-NALCN Monoclonal Antibody (ASM10251) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) NALCN Antibody (D) Composite.



Western Blot analysis of Rat Brain showing detection of ~200 kDa NALCN protein using Mouse Anti-NALCN Monoclonal Antibody, Clone S187-7 (ASM10251). Lane 1: Molecular Weight (MW) Ladder. Lane 3: Rat Brain Membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST.

Primary Antibody: Mouse Anti-NALCN Monoclonal Antibody (ASM10251) 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: ~200 kDa.

### **NALCN Antibody - Background**

NALCN (sodium leak channel non-selective protein), also known as Canlon or VGCNL1 (voltage gated channel-like protein 1), is a 1738 amino acid multi-pass membrane protein that belongs to the cation-nonselective channel family. NALCN is highly conserved in mammals and is widely expressed in the central nervous system. Activated by NK-1R, NALCN is a voltage-independent, nonselective cation channel which is permeable to sodium, potassium and calcium ions. NALCN is responsible for background sodium ion leak conductance in neurons and regulates basal excitability of the nervous systems. Defects of NALCN in mice causes disruption in respiratory rhythm and death occurs within 24 hours of birth. Three isoforms of NALCN exist due to alternative splicing events.

### **NALCN Antibody - References**

1. Lee, J.H., Cribbs, L.L. and Perez-Reyes, E. (1999) FEBS Lett. 445: 231-236.
2. Lu, B., Su, Y., Das, S., Liu, J., Xia, J. and Ren, D. (2007) Cell 129: 371-383.
3. Jospin, M., et al. (2007) Curr. Biol. 17: 1595-1600.
4. Gaultier, C. and Gallego, J. (2008) Appl. Physiol. 104: 1522-1530.
5. Yeh, E., et al. (2008) PLoS Biol. 6: e55.