

## Mouse anti-Mouse, Rat NALCN Monoclonal Antibody | anti-Nalcn antibody

NALCN Antibody: ATTO 488

|                               |                      |                                 |                                                          |
|-------------------------------|----------------------|---------------------------------|----------------------------------------------------------|
| CATALOG #<br><b>AAA102976</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Mouse, Rat</b> | APPLICATIONS<br><b>Immunocytochemistry, Western Blot</b> |
|-------------------------------|----------------------|---------------------------------|----------------------------------------------------------|

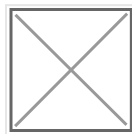
### PRODUCT SYNONYMS

NALCN; Monoclonal Antibody; NALCN Antibody: ATTO 488; VGCNL1; Canlon; Sodium leak channel non-selective protein; Voltage gated channel-like protein 1; A530023G15Rik; bA430M15.1; FLJ23913; FLJ44659; FLJ44764; Four repeat voltage gated ion channel; MGC74524; Putative 4 repeat voltage gated ion channel; anti-Nalcn antibody

### PRODUCT SPECIFICATIONS

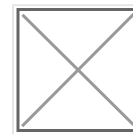
|                                                 |                                              |
|-------------------------------------------------|----------------------------------------------|
| Host                                            | Mouse                                        |
| Reactivity                                      | Mouse, Rat                                   |
| Clonality                                       | Monoclonal                                   |
| Isotype                                         | IgG1                                         |
| Clone Number                                    | S185-7                                       |
| Form/Format                                     | Protein G Purified                           |
| Concentration                                   | 1mg/mL (varies by lot)                       |
| Sequence Length                                 | 1737                                         |
| Applicable Applications for anti-Nalcn antibody | ICC (Immunocytochemistry), WB (Western Blot) |
| Conjugate                                       | ATTO 488                                     |
| Storage Buffer                                  | PBS pH7.4, 50% glycerol, 0.09% sodium azide  |
| Preparation and Storage                         | -20 degree C                                 |

### IMAGES



#### WB (Western Blot)

Western Blot analysis of Rat Brain showing detection of ~200 kDa NALCN protein using Mouse Anti-NALCN Monoclonal Antibody, Clone S187-7 . Lane 1: Molecular Weight (MW) Ladder. Lane 3: Rat Brain Membrane. Load: 15 ug. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-NALCN Monoclonal Antibody at 1:1000 for 16 hours at 4 degree 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.



#### ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NALCN Monoclonal Antibody, Clone S187-7 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-NALCN Monoclonal Antibody 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.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-Nalcn antibody | <p><b>Background Info:</b> Detects ~200kDa.</p> <p><b>Scientific Background:</b> 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.</p> |
| Product Categories/Family for anti-Nalcn antibody   | Ion Channels                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                               |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 24025650                                                                                                                                                                                                      |
| NCBI GeneID                      | 266760                                                                                                                                                                                                        |
| NCBI Accession #                 | NP_705894.1                                                                                                                                                                                                   |
| NCBI GenBank Nucleotide #        | NM_153630.1                                                                                                                                                                                                   |
| UniProt Accession #              | Q6Q760; Q9Z165                                                                                                                                                                                                |
| Molecular Weight                 | 200,491 Da                                                                                                                                                                                                    |
| NCBI Official Full Name          | sodium leak channel non-selective protein                                                                                                                                                                     |
| NCBI Official Synonym Full Names | sodium leak channel, non-selective                                                                                                                                                                            |
| NCBI Official Symbol             | Nalcn                                                                                                                                                                                                         |
| NCBI Official Synonym Symbols    | Vgcnl1                                                                                                                                                                                                        |
| NCBI Protein Information         | sodium leak channel non-selective protein; voltage gated channel like 1; brain voltage-gated cation channel; voltage gated channel-like protein 1; four domain-type voltage-gated ion channel alpha-1 subunit |
| UniProt Protein Name             | Sodium leak channel non-selective protein                                                                                                                                                                     |
| UniProt Gene Name                | Nalcn                                                                                                                                                                                                         |
| UniProt Synonym Gene Names       | Nca; Vgcnl1                                                                                                                                                                                                   |
| UniProt Entry Name               | NALCN_RAT                                                                                                                                                                                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/nalcn-antibody-clone-s185-7-immunocytochemistry-western-blot-elisa/102976>