Datasheet for ABIN2483019

anti-NALCN antibody (AA 1659-1738) (Atto 390)

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3 Images

Overview

Quantity:	100 µg
Target:	NALCN
Binding Specificity:	AA 1659-1738
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NALCN antibody is conjugated to Atto 390
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	Fusion protein amino acids 1659-1738 (cytoplasmic C-terminus) of rat NALCN
Clone:	S187-7
Isotype:	IgG1
Specificity:	Detects ~200 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	NALCN
Alternative Name:	NALCN (NALCN Products)

Target Details

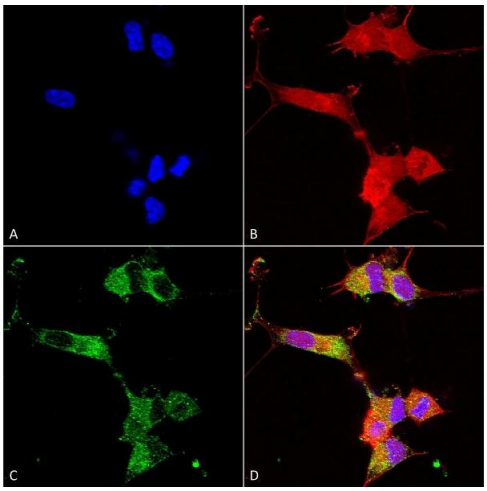
Background:	NALCN (sodium leak channel non-selective protein), alsoknown as CanIon or VGCNL1 (voltage gated channel-like protein 1), is a 1738 amino acid multi-pass membrane protein that belongs to the cation-nonselective channel family. NALCN is highly conserved in mammals and is widely expressed in 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 exists due to alternative splicing events.
Gene ID:	266760
NCBI Accession:	NP_705894
UniProt:	Q6Q760

Application Details

Application Notes:	• WB (1:1000) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN2483019 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.
Restrictions:	For Research Use only

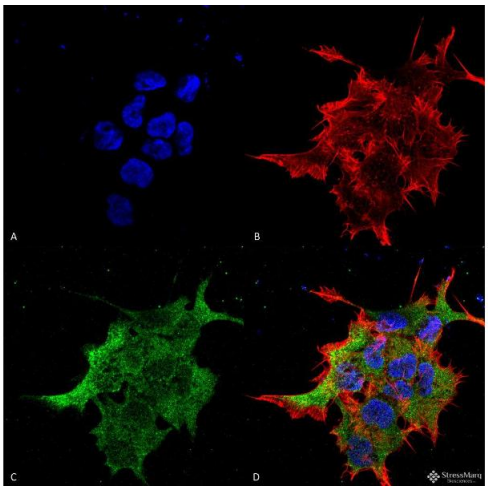
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C



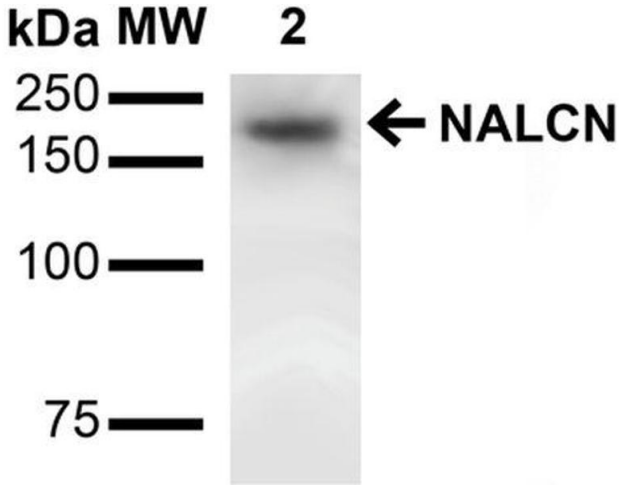
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NALCN Monoclonal Antibody, Clone S187-7 (ABIN2483019). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-NALCN Monoclonal Antibody (ABIN2483019) 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, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) NALCN Antibody (D) Composite.



Immunofluorescence (fixed cells)

Image 2. 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.



Western Blotting

Image 3. 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 µg. 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°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.