

# NALCN (H-300): sc-134937

## BACKGROUND

NALCN (sodium leak channel non-selective protein), also known as Canlon or VGCNL1 (voltage gated channel-like protein 1), is a 1,738 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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NALCN (human) mapping to 13q33.1; Nalcn (mouse) mapping to 14 E5.

## SOURCE

NALCN (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of NALCN of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

NALCN (H-300) is recommended for detection of NALCN of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NALCN (H-300) is also recommended for detection of NALCN in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for NALCN siRNA (h): sc-75861, NALCN siRNA (m): sc-149810, NALCN shRNA Plasmid (h): sc-75861-SH, NALCN shRNA Plasmid (m): sc-149810-SH, NALCN shRNA (h) Lentiviral Particles: sc-75861-V and NALCN shRNA (m) Lentiviral Particles: sc-149810-V.

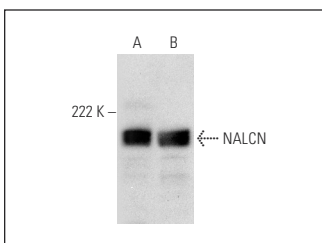
Molecular Weight of NALCN: 200 kDa.

Positive Controls: DU 145 cell lysate: sc-2268 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



NALCN (H-300): sc-134937. Western blot analysis of NALCN expression in DU 145 (A) and HeLa (B) whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.