# NCAM-L1 (N-14): sc-31032



The Power to Question

## **BACKGROUND**

Cell adhesion molecules are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are thought to play an important role in embryogenesis and development. Neuronal cell adhesion molecule (NCAM) expression is observed in a variety of human tumors, including neuroblastomas, rhabdomyosarcomas, Wilm's tumors, Ewing's sarcomas and some primitive myeloid malignancies. The NCAM-L1 adhesion molecule (CD171) plays an important role in axon guidance and cell migration in the nervous system. The presence of NCAM-L1 might contribute to tumor progression by promoting cell adhesion and migration and is known to be expressed by neurons, neuroblastomas and other malignant tumors.

# **CHROMOSOMAL LOCATION**

Genetic locus: L1CAM (human) mapping to Xq28; L1cam (mouse) mapping to X A7.3.

#### SOURCE

NCAM-L1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of NCAM-L1 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31032 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

NCAM-L1 (N-14) is recommended for detection of NCAM-L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NCAM-L1 (N-14) is also recommended for detection of NCAM-L1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NCAM-L1 siRNA (h): sc-43172, NCAM-L1 siRNA (m): sc-43173, NCAM siRNA (r): sc-156119, NCAM-L1 shRNA Plasmid (h): sc-43172-SH, NCAM-L1 shRNA Plasmid (m): sc-43173-SH, NCAM shRNA Plasmid (r): sc-156119-SH, NCAM-L1 shRNA (h) Lentiviral Particles: sc-43172-V, NCAM-L1 shRNA (m) Lentiviral Particles: sc-43173-V and NCAM shRNA (r) Lentiviral Particles: sc-156119-V.

Molecular Weight of NCAM-L1 proteolytically cleaved form: 85 kDa.

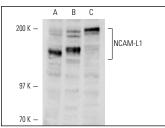
Molecular Weight of full length NCAM-L1 isoforms: 140/180/220 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, IMR-32 cell lysate: sc-2409 or HeLa whole cell lysate: sc-2200.

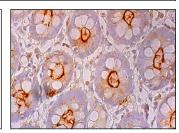
#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## **DATA**



NCAM-L1 (N-14): sc-31032. Western blot analysis of NCAM-L1 expression in IMR-32 (A), HeLa (B) and SH-SY5Y (C) whole cell lysates.



NCAM-L1 (N-14): sc-31032. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing apical membrane staining of glandular cells

# **SELECT PRODUCT CITATIONS**

 Tagliavacca, L., et al. 2013. L1CAM and its cell-surface mutants: new mechanisms and effects relevant to the physiology and pathology of neural cells. J. Neurochem. 124: 397-409.

### **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.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed Try NCAM-L1 (D-5): sc-374046 or NCAM-L1 (C-2): sc-514360, our highly recommended monoclonal aternatives to NCAM-L1 (N-14). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see NCAM-L1 (D-5): sc-374046.

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