## SANTA CRUZ BIOTECHNOLOGY, INC.

# NCAM-L1 (I-18): sc-31034



#### 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.

#### REFERENCES

- Kemshead, J.T., et al. 1983. Monoclonal antibody UJ 127:11 detects a 220,000-240,000 kDa glycoprotein present on a sub-set of neuroectodermally derived cells. Int. J. Cancer 31: 187-195.
- Bourne, S., et al. 1989. Monoclonal antibodies M340 and UJ181.4 recognize antigens associated with primitive neuroectodermal tumours/tissues. Hybridoma 8: 415-426.
- Patel, K., et al. 1993. Vase mini-exon usage by NCAM is not restricted to tumours of neuroectodermal origin. Int. J. Cancer 54: 772-777.
- Jorgensen, O.S. 1995. Neural cell adhesion molecule (NCAM) as a quantitative marker in synaptic remodeling. Neurochem. Res. 20: 533-547.
- Edelman, G.M. and Jones, F.S. 1995. Developmental control of NCAM expression by HOX and PAX gene products. Philos. Trans. R. Soc. Lond. B. Biol. Sci. 349: 305-312.
- 6. Dominici, C., et al. 1996. Bone marrow micrometastases in a patient with localized Wilms' tumor. Med. Ped. Oncol. 26: 125-128.

### CHROMOSOMAL LOCATION

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

#### SOURCE

NCAM-L1 (I-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of NCAM-L1 of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-31034 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

NCAM-L1 (I-18) 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 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).

NCAM-L1 (I-18) is also recommended for detection of NCAM-L1 in additional species, including equine, canine, bovine and porcine.

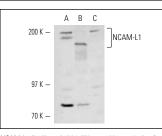
Suitable for use as control antibody for NCAM-L1 siRNA (h): sc-43172, NCAM-L1 siRNA (m): sc-43173, NCAM-L1 shRNA Plasmid (h): sc-43172-SH, NCAM-L1 shRNA Plasmid (m): sc-43173-SH, NCAM-L1 shRNA (h) Lentiviral Particles: sc-43172-V and NCAM-L1 shRNA (m) Lentiviral Particles: sc-43173-V.

Molecular Weight of NCAM-L1 isoforms: 140, 180, and 220 kDa.

Molecular Weight of NCAM-L1 proteolytic cleavage product: 85 kDa.

Positive Controls: F9 cell lysate: sc-2245, IMR-32 cell lysate: sc-2409 or SK-N-MC cell lysate: sc-2237.

#### DATA



NCAM-L1 (I-18): sc-31034. Western blot analysis of NCAM-L1 expression in IMR-32 (A), F9 (B) and SH-SY5Y (C) whole cell lysates.

#### SELECT PRODUCT CITATIONS

 Kuwajima, A., et al. 2009. Differentiation of B16-BL6 melanoma cells into microtubule-associated protein 2-positive cells after treatment with the histone deacetylase inhibitors butyrate and tichostatin A. J. Health Science 55: 138-142.

#### **RESEARCH USE**

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

# 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 (I-18). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see NCAM-L1 (D-5): sc-374046.