#### SANTA CRUZ BIOTECHNOLOGY, INC.

# NCAM-L1 (C-20): sc-1508



#### 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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic 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-1508 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

NCAM-L1 (C-20) 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 (C-20) is also recommended for detection of NCAM-L1 in additional species, including 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 proteolytically cleaved form: 85 kDa.

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

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

#### STORAGE

Store at 4° C, \*\*D0 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.

#### DATA





NCAM-I1 (C-20): sc-1508. Western blot analysis of

NCAM-L1 expression in F9 (A) and SK-N-MC (B)

NCAM-L1 (C-20): sc-1508. Western blot analysis of NCAM-L1 expression in IMR-32 (A), SK-N-NC (B), HeLa (C), T98G (D) and SH-SYSY (E) whole cell lysates and human cerebellum tissue extract (F).

## SELECT PRODUCT CITATIONS

1. Relvas, J.B., et al. 1997. Exogenous genes are expressed in mdx muscle fibres following the implantation of primary mouse skin cells. Basic Appl. Myol. 7: 211-219.

whole cell lysates.

- 2. Kavushansky, A., et al. 2009. Physical stress differs from psychosocial stress in the pattern and time-course of behavioral responses, serum corticosterone and expression of plasticity-related genes in the rat. Stress 12: 412-425.
- Ilin, Y. and Richter-Levin, G. 2009. Enriched environment experience overcomes learning deficits and depressive-like behavior induced by juvenile stress. PLoS ONE 4: e4329.
- 4. Li, Y. and Galileo, D.S. 2010. Soluble L1CAM promotes breast cancer cell adhesion and migration *in vitro*, but not invasion. Cancer Cell Int. 10: 34.
- Dou, X., et al. 2011. Two alcohol binding residues interact across a domain interface of the L1 neural cell adhesion molecule and regulate cell adhesion. J. Biol. Chem. 286: 16131-16139.
- Yang, M., et al. 2011. L1 stimulation of human glioma cell motility correlates with FAK activation. J. Neurooncol. 105: 27-44.
- 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.
- Dou, X., et al. 2013. Mitogen-activated protein kinase modulates ethanol inhibition of cell adhesion mediated by the L1 neural cell adhesion molecule. Proc. Natl. Acad. Sci. USA 110: 5683-5688.

### 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 (C-20). 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.