

NCAM-L1 (UJ181.4): sc-53387

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

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2. Bourne, S., et al. 1989. Monoclonal antibodies M340 and UJ181.4 recognize antigens associated with primitive neuroectodermal tumours/tissues. *Hybridoma* 8: 415-426.
3. 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.
4. Jorgensen, O.S. 1995. Neural cell adhesion molecule (NCAM) as a quantitative marker in synaptic remodeling. *Neurochem. Res.* 20: 533-547.
5. 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. Pediatr. Oncol.* 26: 125-128.
7. Kolkova, K. et al. 2000. Identification of an amino acid sequence motif in the cytoplasmic domain of the NCAM-140 kDa isoform essential for its neuritogenic activity. *J. Neurochem.* 75: 1274-1282.
8. Fogel, M., et al. 2003. L1 adhesion molecule (CD171) in development and progression of human malignant melanoma. *Cancer Lett.* 189: 237-247.
9. Deichmann, M., et al. 2003. Adhesion molecules CD171 (L1CAM) and CD24 are expressed by primary neuroendocrine carcinomas of the skin (Merkel cell carcinomas). *J. Cutan. Pathol.* 30: 363-368.

CHROMOSOMAL LOCATION

Genetic locus: L1CAM (human) mapping to Xq28.

SOURCE

NCAM-L1 (UJ181.4) is a mouse monoclonal antibody raised against fetal brain of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NCAM-L1 (UJ181.4) is recommended for detection of NCAM-L1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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

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

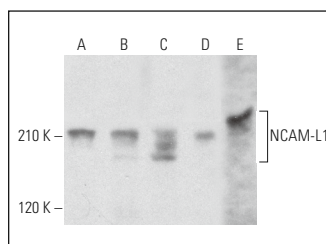
Molecular Weight of NCAM-L1 proteolytically cleaved form: 85 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, SK-N-MC cell lysate: sc-2237 or SH-SY5Y cell lysate: sc-3812.

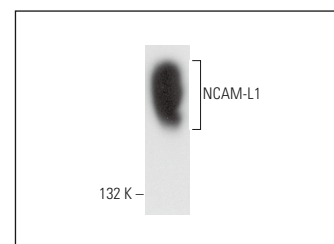
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



NCAM-L1 (UJ181.4): sc-53387. Western blot analysis of NCAM-L1 expression in SK-N-MC (A), HeLa (B), SH-SY5Y (C), Hep G2 (D) and A549 (E) whole cell lysates.



NCAM-L1 (UJ181.4): sc-53387. Western blot analysis of NCAM-L1 expression in IMR-32 whole cell lysate.

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.



See **NCAM-L1 (D-5): sc-374046** for NCAM-L1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.