

NCAM-L1 (D-5): sc-374046

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 (D-5) is a mouse monoclonal antibody raised against amino acids 921-1120 mapping near the C-terminus of NCAM-L1 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.

NCAM-L1 (D-5) is available conjugated to agarose (sc-374046 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374046 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374046 PE), fluorescein (sc-374046 FITC), Alexa Fluor® 488 (sc-374046 AF488), Alexa Fluor® 546 (sc-374046 AF546), Alexa Fluor® 594 (sc-374046 AF594) or Alexa Fluor® 647 (sc-374046 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374046 AF680) or Alexa Fluor® 790 (sc-374046 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

NCAM-L1 (D-5) is recommended for detection of NCAM-L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (start-ing dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

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

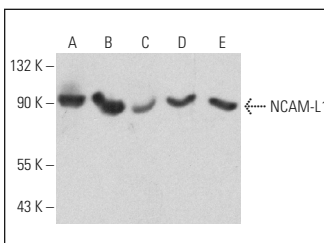
Molecular Weight of NCAM-L1 full length isoforms: 140/180/220 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Neuro-2A whole cell lysate: sc-364185 or EOC 20 whole cell lysate: sc-364187.

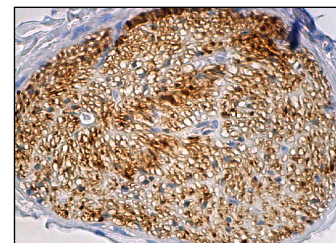
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



NCAM-L1 (D-5): sc-374046. Western blot analysis of NCAM-L1 expression in Hep G2 (A), Neuro-2A (B), EOC 20 (C), C6 (D) and H19-7/IGF-IR (E) whole cell lysates.



NCAM-L1 (D-5): sc-374046. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane staining of nerve cells in ganglion.

SELECT PRODUCT CITATIONS

- Roberts, C.M., et al. 2016. TWIST1 drives cisplatin resistance and cell survival in an ovarian cancer model, via upregulation of GAS6, L1CAM, and Akt signalling. *Sci. Rep.* 6: 37652.
- Torres, V.I., et al. 2021. Selective surface and intraluminal localization of Wnt ligands on small extracellular vesicles released by HT-22 hippocampal neurons. *Front. Cell Dev. Biol.* 9: 735888.
- Sun, X., et al. 2022. Generation of the chondroprotective proteomes by activating PI3K and TNFα signaling. *Cancers* 14: 3039.

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 for detailed protocols and support products.

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