

NCAM (NKI-nbl-1): sc-59866

BACKGROUND

Neural cell adhesion molecules (NCAMs) are a family of closely related cell surface glycoproteins involved in cell to cell interactions during growth and thought to play an important role in embryogenesis and development. The expression of these molecules is widespread in all three germ layers during embryogenesis, but is more restrictive in adult tissues. NCAM expression is observed in a variety of human tumors including neuroblastomas, rhabdomyosarcomas, Wilms' tumor, Ewing's sarcoma and some primitive myeloid malignancies. Multiple isoforms of NCAM have been reported in both mouse and human brain tissue. In humans, NCAMs arise from differential splicing and use of alternative polyadenylation sites of a single gene mapping to 11q23.1.

REFERENCES

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- Walsh, F.S. 1988. The NCAM gene is a complex transcriptional unit. *Neurochem. Int.* 12: 263-267.
- Roth, J., et al. 1988. Presence of the long chain form of polysialic acid of the neural cell adhesion molecule in Wilms' tumor: identification of a cell adhesion molecule as an oncodevelopmental antigen and implications for tumor histogenesis. *Am. J. Pathol.* 133: 227-240.
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- Phimister, E., et al. 1991. Expression of neural cell adhesion molecule (NCAM) isoforms in neuroblastoma. *J. Clin. Pathol.* 44: 580-585.

CHROMOSOMAL LOCATION

Genetic locus: NCAM1 (human) mapping to 11q23.1.

SOURCE

NCAM (NKI-nbl-1) is a mouse monoclonal antibody raised against NCAM of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

NCAM (NKI-nbl-1) is recommended for detection of NCAM of 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for NCAM siRNA (h): sc-29404, NCAM shRNA Plasmid (h): sc-29404-SH and NCAM shRNA (h) Lentiviral Particles: sc-29404-V.

Molecular Weight of NCAM isoforms: 140/180 kDa.

Molecular Weight of NCAM GPI-linked isoforms: 120/125 kDa.

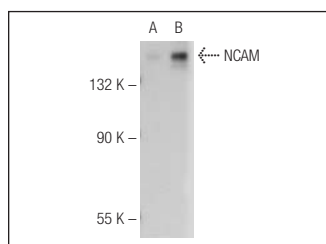
Molecular Weight of NCAM soluble fragment: 110 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, NCAM (h2): 293T Lysate: sc-177603 or SK-N-SH cell lysate: sc-2410.

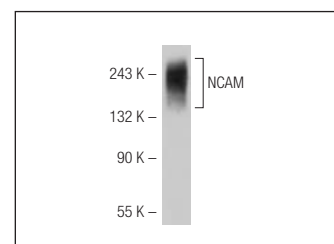
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NCAM (NKI-nbl-1): sc-59866. Western blot analysis of NCAM expression in non-transfected: sc-117752 (A) and human NCAM transfected: sc-177603 (B) 293T whole cell lysates.



NCAM (NKI-nbl-1): sc-59866. Western blot analysis of NCAM 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.

PROTOCOLS

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