

NCAM2 (Y-20): sc-51336

BACKGROUND

NCAM2 (neural cell adhesion molecule 2) is an 837 amino acid protein encoded by the human gene NCAM2. NCAM2 contains five immunoglobulin-like domains, two Fibronectin type III domains, a transmembrane domain and a cytoplasmic domain. The gene is expressed most strongly in human adult and fetal brain. NCAM2 is a member of the neural cell adhesion molecule (NCAM) family. NCAMs are closely related cell surface glycoproteins involved in cell to cell interactions during growth and are thought to play an important role in embryogenesis and development. NCAM2 is considered a good candidate for involvement in certain Down syndrome phenotypes because a slight overexpression of NCAMs increases many-fold the homotypic adhesion properties of cells. Stat5 regulates NCAM2 *in vivo* by binding to the NCAM2 intron in the NKL natural killer cell line; this binding is induced by cytokines that activate Stat5. Neither Stat1 nor Stat3 bind to this region, despite sharing a consensus binding sequence with Stat5.

REFERENCES

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4. Berendsen, H.H., et al. 1989. Clinical characterization of non-small-cell lung cancer tumors showing neuroendocrine differentiation features. *J. Clin. Oncol.* 7: 1614-1620.
5. Lanier, L.L., et al. 1989. Identity of Leu-19 (CD56) leucocyte differentiation antigen and neural cell adhesion molecule. *J. Exp. Med.* 169: 2233-2238.
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7. Figarella-Branger, D.F., et al. 1990. Differential spectrum of expression of neural cell adhesion molecule isoforms and L1 adhesion molecules on neuroectodermal tumors. *Cancer Res.* 50: 6364-6370.
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CHROMOSOMAL LOCATION

Genetic locus: NCAM2 (human) mapping to 21q21.1; Ncam2 (mouse) mapping to 16 C3.3.

SOURCE

NCAM2 (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of NCAM2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51336 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NCAM2 (Y-20) is recommended for detection of NCAM2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

NCAM2 (Y-20) is also recommended for detection of NCAM2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NCAM2 siRNA (h): sc-91388, NCAM2 siRNA (m): sc-149850, NCAM2 shRNA Plasmid (h): sc-91388-SH, NCAM2 shRNA Plasmid (m): sc-149850-SH, NCAM2 shRNA (h) Lentiviral Particles: sc-91388-V and NCAM2 shRNA (m) Lentiviral Particles: sc-149850-V.

Molecular Weight of NCAM2 isoforms: 125/94 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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


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Try **NCAM2 (44): sc-136328**, our highly recommended monoclonal alternative to NCAM2 (Y-20).