SANTA CRUZ BIOTECHNOLOGY, INC.

NCAM2 (H-70): sc-134876



BACKGROUND

NCAM2 (neural cell adhesion molecule 2) is an 837 amino acid protein encoded by the human gene NCAM2. NCAM2 contains five immunoglobulinlike 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 a 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.

CHROMOSOMAL LOCATION

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

SOURCE

NCAM2 (H-70) is a rabbit polyclonal antibody raised against amino acids 323-392 mapping within an extracellular domain of NCAM2 of human origin.

PRODUCT

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

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

NCAM2 (H-70) 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), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

NCAM2 (H-70) is also recommended for detection of NCAM2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NCAM siRNA (h): sc-29404, NCAM siRNA (m): sc-36017, NCAM shRNA Plasmid (h): sc-29404-SH, NCAM shRNA Plasmid (m): sc-36017-SH, NCAM shRNA (h) Lentiviral Particles: sc-29404-V and NCAM shRNA (m) Lentiviral Particles: sc-36017-V.

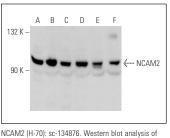
Molecular Weight of NCAM2 isoforms: 125/94 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or IMR-32 cell lysate: sc-2409.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



NCAM2 (H-7/J): Sc-1348/6. Western blot analysis of NCAM2 expression in HeLa (A), MCF7 (B), ACHN (C) and IMR-32 (D) whole cell lysates and mouse kidney (E) and rat brain (F) tissue extracts.

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.

MONOS Satisfation Guaranteed

Try **NCAM2 (44): sc-136328**, our highly recommended monoclonal alternative to NCAM2 (H-70).