SANTA CRUZ BIOTECHNOLOGY, INC.

Neurotrimin (C-13): sc-47234

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cell adhesion molecules (CAMs) influence cell growth, differentiation, embryogenesis, immune response and cancer metastasis by networking information from the extracellular matrix to the cell. The four major families of cell adhesion molecules are immunoglobulin (Ig) superfamily (calcium-independent transmembrane glycoproteins), integrins (transmembrane non-covalently linked heterodimers of α and β subunits), calcium-dependent cadherins and divalent cation-dependent selectins. Regulation of neuronal synaptic adhesion by CAMs has proven important for learning and memory. Proper embryonic morphogenic development is also heavily dependent on the regulation of cell adhesion molecules. Neurotrimin (hNT) is a neural cell adhesion molecule localizing to the cell membrane, where it acts as a lipid-anchor. Neurotrimin belongs to the IgLON family of proteins, a member of the larger immunoglobulin superfamily.

CHROMOSOMAL LOCATION

Genetic locus: NTM (human) mapping to 11q25; Ntm (mouse) mapping to 9 A4.

SOURCE

Neurotrimin (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Neurotrimin 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.

Blocking peptide available for competition studies, sc-47234 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Neurotrimin (C-13) is recommended for detection of mature Neurotrimin and precursor isoforms 1 and 2 of mouse, rat and 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)], 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).

Suitable for use as control antibody for Neurotrimin siRNA (h): sc-61191, Neurotrimin siRNA (m): sc-61192, Neurotrimin shRNA Plasmid (h): sc-61191-SH, Neurotrimin shRNA Plasmid (m): sc-61192-SH, Neurotrimin shRNA (h) Lentiviral Particles: sc-61191-V and Neurotrimin shRNA (m) Lentiviral Particles: sc-61192-V.

Molecular Weight of Neurotrimin: 39 kDa.

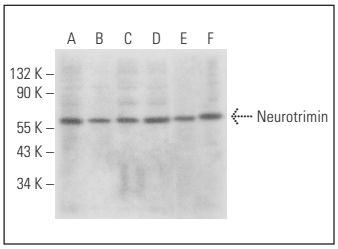
Molecular Weight of glycosylated Neurotrimin: 55-65 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Neurotrimin (C-13): sc-47234. Western blot analysis of Neurotrimin expression in Jurkat (**A**), Hep G2 (**B**), HeLa (**C**), K-562 (**D**), Ca Ski (**E**) and MOLT-4 (**F**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Farina, F., et al. 2009. Characterization of prion protein-enriched domains, isolated from rat cerebellar granule cells in culture. J. Neurochem. 110: 1038-1048.

PROTOCOLS

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RESEARCH USE

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