SANTA CRUZ BIOTECHNOLOGY, INC.

Neurotrimin (h): 293T Lysate: sc-116403

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.

REFERENCES

1. Yoon, I.K., et al. 2004. Exploration of replicative senescence-associated genes in human dermal fibroblasts by cDNA microarray technology. Exp. Gerontol. 39: 1369-1378.
2. Liu, J., et al. 2004. The cloning and preliminarily functional analysis of the human neurotrimin gene. Sci. China C Life Sci. 47: 158-164.
3. Zhang, Z. and Henzel, W.J. 2004. Signal peptide prediction based on analysis of experimentall sites. Protein Sci. 13: 2819-2824.
4. Reed, J., et al. 2004. Diglons are heterodimeric proteins composed of IgLON subunits, and Diglon-CO inhibits neurite outgrowth from cerebellar granule cells. J. Cell Sci. 117: 3961-3973.
5. Ntougkos, E., et al. 2005. The IgLON family in epithelial ovarian cancer: expression profiles and clinicopathologic correlates. Clin. Cancer Res. 11: 5764-5768.
6. Grijalva, I., et al. 2006. Expression of neurotrimin in the normal and injured adult human spinal cord. Spinal Cord 44: 280-286.

CHROMOSOMAL LOCATION

Genetic locus: NTM (human) mapping to 11q25.

PRODUCT

Neurotrimin (h): 293T Lysate represents a lysate of human Neurotrimin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Neurotrimin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Neurotrimin antibodies. Recommended use: 10-20 µl per lane.

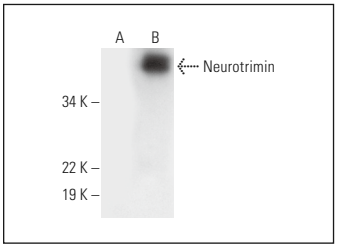
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Neurotrimin (F-9): sc-390941 is recommended as a positive control antibody for Western Blot analysis of enhanced human Neurotrimin expression in Neurotrimin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-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.

DATA



Neurotrimin (F-9): sc-390941. Western blot analysis of Neurotrimin expression in non-transfected: sc-117752 (**A**) and human Neurotrimin transfected: sc-116403 (**B**) 293T whole cell lysates.

RESEARCH USE

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