SANTA CRUZ BIOTECHNOLOGY, INC.

Neurensin-1 (D-12): sc-168740



BACKGROUND

Neurensin-1 (NRSN1), also designated vesicular membrane protein of 24 kDa (VMP) or Neuro-p24, is a 195 amino acid multi-pass membrane protein belonging to the VMP family that is involved in the transport of neural organelle transport and in the transduction of nerve signals or in nerve growth. Expressed solely in brain, Neurensin-1 is also thought to play a role in neurite extension. The gene encoding Neurensin-2 maps to human chromosome 6, which contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome, 21hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6.

REFERENCES

- 1. Mungall, A.J., et. al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
- 2. Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. Am. J. Med. Genet. A. 130A: 160-164.
- 3. McQueen, M.B., et. al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6g and 8g. Am. J. Hum. Genet. 77: 582-595.
- 4. Nakanishi, K., et al. 2006. Molecular characterization of a transport vesicle protein Neurensin-2, a homologue of Neurensin-1, expressed in neural cells. Brain Res. 1081: 1-8.
- 5. Nagata, K., et al. 2006. Neurensin-1 expression in the mouse retina during postnatal development and in the cultured retinal neurons. Brain Res. 1081: 65-71.
- 6. Park, E., et al. 2007. Modulation of parkin gene expression in noradrenergic neuronal cells. Int. J. Dev. Neurosci. 25: 491-497.
- 7. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. Genes Chromosomes Cancer 47: 159-164.

CHROMOSOMAL LOCATION

Genetic locus: NRSN1 (human) mapping to 6p22.3; Nrsn1 (mouse) mapping to 13 A3.1.

SOURCE

Neurensin-1 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Neurensin-1 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168740 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Neurensin-1 (D-12) is recommended for detection of Neurensin-1 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); non cross-reactive with Neurensin-2.

Neurensin-1 (D-12) is also recommended for detection of Neurensin-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Neurensin-1 siRNA (h): sc-95247, Neurensin-1 siRNA (m): sc-149926, Neurensin-1 shRNA Plasmid (h): sc-95247-SH, Neurensin-1 shRNA Plasmid (m): sc-149926-SH, Neurensin-1 shRNA (h) Lentiviral Particles: sc-95247-V and Neurensin-1 shRNA (m) Lentiviral Particles: sc-149926-V.

Molecular Weight of Neurensin-1: 24 kDa.

Positive Controls: rat brain extract: sc-2392.

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.

MONOS Satisfation Guaranteed

Try Neurensin-1 (22): sc-136360, our highly recommended monoclonal alternative to Neurensin-1 (D-12).