

Neurensin-1 (22): sc-136360

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, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6.

REFERENCES

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- 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.
- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.
- 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.
- 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.
- Park, E., et al. 2007. Modulation of Parkin gene expression in noradrenergic neuronal cells. *Int. J. Dev. Neurosci.* 25: 491-497.

CHROMOSOMAL LOCATION

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

SOURCE

Neurensin-1 (22) is a mouse monoclonal antibody raised against amino acids 93-196 of Neurensin-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

Neurensin-1 (22) is available conjugated to agarose (sc-136360 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-136360 HRP), 200 µg/ml, for WB, IHC(P) and ELISA.

RESEARCH USE

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

APPLICATIONS

Neurensin-1 (22) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

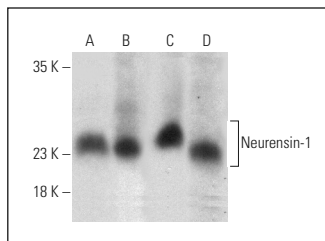
Molecular Weight of Neurensin-1: 24 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, SK-N-SH cell lysate: sc-2410 or BE (2)-M17 whole cell lysate: sc-364358.

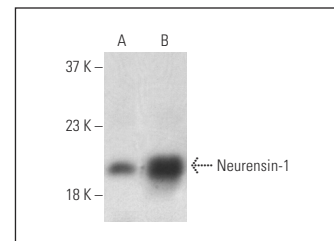
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Neurensin-1 (22): sc-136360. Western blot analysis of Neurensin-1 expression in BE (2)-M17 (A), SH-SY5Y (B) and SK-N-SH (C) whole cell lysates and human cerebellum tissue extract (D).



Neurensin-1 (22): sc-136360. Western blot analysis of Neurensin-1 expression in SH-SY5Y (A) and BE (2)-M17 (B) whole cell lysates. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.

STORAGE

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

PROTOCOLS

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