SANTA CRUZ BIOTECHNOLOGY, INC.

Neurensin-2 (H-9): sc-515220

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Neurensin-2 (NRSN2) is a 204 amino acid multi-pass membrane protein belonging to the VMP family that may be involved in the transport and maintenance of vesicles. Expressed in brain, Neurensin-2 localizes to cell bodies of hippocampus, diagonal band, amygdaloid nucleus, and habenula nucleus, and is a potential tumor suppressor gene and candidate biomarker for long-term survival in patients with hepatocellular carcinoma (HCC). The gene encoding Neurensin-2 maps to human chromosome 20, which comprises approximately 2% of the human genome, contains nearly 63 million bases and encodes over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought important for seminal production and may be potential targets for male contraception.

REFERENCES

1. 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.
2. Ville, D., et al. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. Epilepsia 47: 543-549.
3. Joó, J.G., et al. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. J. Reprod. Med. 51: 209-212.
4. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610666. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. Asian J. Androl. 9: 540-544.

CHROMOSOMAL LOCATION

Genetic locus: NRSN2 (human) mapping to 20p13.

SOURCE

Neurensin-2 (H-9) is a mouse monoclonal antibody raised against amino acids 90-204 mapping at the C-terminus of Neurensin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Neurensin-2 (H-9) is available conjugated to agarose (sc-515220 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515220 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515220 PE), fluorescein (sc-515220 FITC), Alexa Fluor® 488 (sc-515220 AF488), Alexa Fluor® 546 (sc-515220 AF546), Alexa Fluor® 594 (sc-515220 AF594) or Alexa Fluor® 647 (sc-515220 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515220 AF680) or Alexa Fluor® 790 (sc-515220 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Neurensin-2 (H-9) is recommended for detection of Neurensin-2 of human origin by Western Blotting (starting dilution 1:100, 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 Neurensin-2 siRNA (h): sc-75906, Neurensin-2 shRNA Plasmid (h): sc-75906-SH and Neurensin-2 shRNA (h) Lentiviral Particles: sc-75906-V.

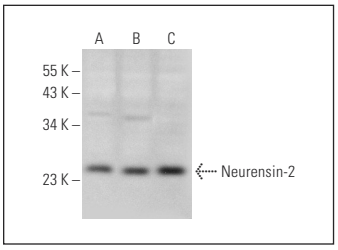
Molecular Weight of Neurensin-2: 22 kDa.

Positive Controls: JAR cell lysate: sc-2276, T98G cell lysate: sc-2294 or K-562 whole cell lysate: sc-2203.

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-2 (H-9): sc-515220. Western blot analysis of Neurensin-2 expression in JAR (**A**), T98G (**B**) and K-562 (**C**) whole cell lysates.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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