SANTA CRUZ BIOTECHNOLOGY, INC.

NRBP2 (Q-13): sc-87336

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The Power to Question

BACKGROUND

The nuclear receptor binding proteins (NRBPs) are host cellular proteins that influence subcellular trafficking between the endoplasmic reticulum (ER) and the Golgi apparatus via interactions with GTPases. As multidomain putative adaptor proteins, NRBPs modulate multiple signaling pathways by regulating the formation of signaling complexes in the cytoplasm. NRBP2 (nuclear receptor binding protein 2), also known as TRG16 or pp9320, is a 258 amino acid member of the Ser/Thr protein kinase family. NRBP2 contains a single protein kinase domain that is predicted to be catalytically inactive. Existing as two alternatively spliced isoforms, NRBP2 is suggested to be involved in neural progenitor cell survival. The gene encoding NRBP2 is located on human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

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2. De Langhe, S., Haataja, L., Senadheera, D., Groffen, J. and Heisterkamp, N. 2002. Interaction of the small GTPase Rac 3 with NRBP, a protein with a kinase-homology domain. Int. J. Mol. Med. 9: 451-459.
3. Chua, J.J., Ng, M.M. and Chow, V.T. 2004. The non-structural 3 (NS3) protein of dengue virus type 2 interacts with human nuclear receptor binding protein and is associated with alterations in membrane structure. Virus Res. 102: 151-163.
4. Wang, H., Sun, X., Luo, Y., Lin, Z. and Wu, J. 2006. Adapter protein NRBP associates with JAB1 and negatively regulates AP-1 activity. FEBS Lett. 580: 6015-6021.
5. Larsson, J., Forsberg, M., Brännvall, K., Zhang, X.Q., Enarsson, M., Hedborg, F. and Forsberg-Nilsson, K. 2008. Nuclear receptor binding protein 2 is induced during neural progenitor differentiation and affects cell survival. Mol. Cell. Neurosci. 39: 32-39.

CHROMOSOMAL LOCATION

Genetic locus: NRBP2 (human) mapping to 8q24.3; Nrbp2 (mouse) mapping to 15 D3.

SOURCE

NRBP2 (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NRBP2 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-87336 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

NRBP2 (Q-13) is recommended for detection of NRBP2 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).

NRBP2 (Q-13) is also recommended for detection of NRBP2 in additional species, including canine and bovine.

Suitable for use as control antibody for NRBP2 siRNA (h): sc-77494, NRBP2 siRNA (m): sc-150063, NRBP2 shRNA Plasmid (h): sc-77494-SH, NRBP2 shRNA Plasmid (m): sc-150063-SH, NRBP2 shRNA (h) Lentiviral Particles: sc-77494-V and NRBP2 shRNA (m) Lentiviral Particles: sc-150063-V.

Molecular Weight of NRBP2: 55-60 kDa.

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.

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 or our catalog for detailed protocols and support products.