

NRBP (C-14): sc-47252

BACKGROUND

The nuclear receptor binding protein (NRBP) is a host cellular protein that influences the subcellular trafficking between the endoplasmic reticulum (ER) and the Golgi apparatus via interactions with GTPases. As a multidomain putative adaptor protein, NRBP modulates multiple signaling pathways by regulating the formation of signaling complexes in the cytoplasm. NRBP, which can form a homodimer, binds to MLF1. This binding recruits a serine kinase which phosphorylates both of the proteins, preventing MLF1 from binding to YWHAZ. NRBP is a cytoplasmic protein, but it can co-localize with Rac 3 to the endomembrane and can be seen at the cell periphery in lamellipodia. The NRBP gene maps to human chromosome 2p23 and is ubiquitously expressed in human tissues, with highest levels detected in testis.

REFERENCES

1. Hooper, J.D., Baker, E., Ogbourne, S.M., Sutherland, G.R. and Antalis, T.M. 2000. Cloning expressed, multidomain putative adapter protein. *Genomics* 66: 113-118.
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.

CHROMOSOMAL LOCATION

Genetic locus: NRBP1 (human) mapping to 2p23.3; Nrbp1 (mouse) mapping to 5 B1.

SOURCE

NRBP (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NRBP 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-47252 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

NRBP (C-14) is recommended for detection of NRBP 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).

NRBP (C-14) is also recommended for detection of NRBP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NRBP siRNA (h): sc-61231, NRBP siRNA (m): sc-61232, NRBP shRNA Plasmid (h): sc-61231-SH, NRBP shRNA Plasmid (m): sc-61232-SH, NRBP shRNA (h) Lentiviral Particles: sc-61231-V and NRBP shRNA (m) Lentiviral Particles: sc-61232-V.

Molecular Weight of NRBP: 60 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

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.