

NRBP (h): 293T Lysate: sc-170291

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. It 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 2p23.3 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: 151-63.
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.

CHROMOSOMAL LOCATION

Genetic locus: NRBP1 (human) mapping to 2p23.3.

PRODUCT

NRBP (h): 293T Lysate represents a lysate of human NRBP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

NRBP (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive NRBP antibodies. Recommended use: 10-20 µl per lane.

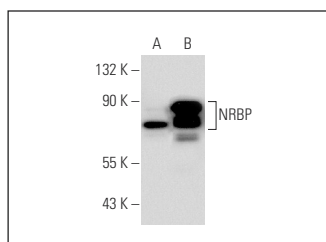
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NRBP (X-13): sc-101288 is recommended as a positive control antibody for Western Blot analysis of enhanced human NRBP expression in NRBP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



NRBP (X-13): sc-101288. Western blot analysis of NRBP expression in non-transfected: sc-117752 (A) and human NRBP transfected: sc-170291 (B) 293T whole cell lysates.

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.