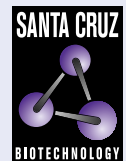


NRBP (C-1): sc-390087



The Power to Question

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 RAC3 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., et al. 2000. Cloning expressed, multidomain putative adapter protein. *Genomics* 66: 113-118.
2. De Langhe, S., et al. 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., et al. 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-1) is a mouse monoclonal antibody raised against amino acids 274-313 mapping within an internal region of NRBP of human origin.

PRODUCT

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

NRBP (C-1) is available conjugated to agarose (sc-390087 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390087 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390087 PE), fluorescein (sc-390087 FITC), Alexa Fluor® 488 (sc-390087 AF488), Alexa Fluor® 546 (sc-390087 AF546), Alexa Fluor® 594 (sc-390087 AF594) or Alexa Fluor® 647 (sc-390087 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390087 AF680) or Alexa Fluor® 790 (sc-390087 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

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.

APPLICATIONS

NRBP (C-1) is recommended for detection of NRBP of mouse, rat and 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).

NRBP (C-1) is also recommended for detection of NRBP in additional species, including equine, 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.

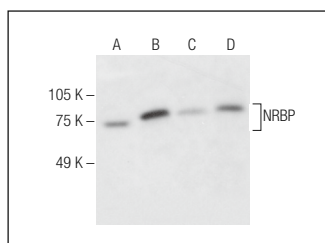
Molecular Weight of NRBP: 60 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

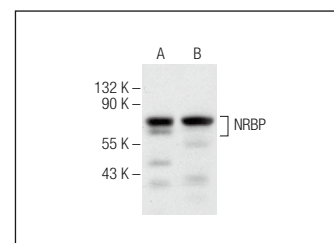
RECOMMENDED SUPPORT REAGENTS

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



NRBP (C-1): sc-390087. Western blot analysis of NRBP expression in Jurkat (A), MCF7 (B), HeLa (C) and HS 181.Tes (D) whole cell lysates.



NRBP (C-1): sc-390087. Western blot analysis of NRBP expression in HL-60 (A) and Hep G2 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chandrani, P., et al. 2015. Integrated genomics approach to identify biologically relevant alterations in fewer samples. *BMC Genomics* 16: 936.

PROTOCOLS

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