

# NRBP (H-40): sc-292613

## 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 Rac3 with NRBP, a protein with a kinase-homology domain. *Int. J. Mol. Med.* 9: 451-459.

## CHROMOSOMAL LOCATION

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

## SOURCE

NRBP (H-40) is a rabbit polyclonal antibody raised against amino acids 274-313 mapping within an internal region 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.

## APPLICATIONS

NRBP (H-40) 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), 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 (H-40) is also recommended for detection of NRBP in additional species, including equine, canine, bovine, porcine and avian.

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.

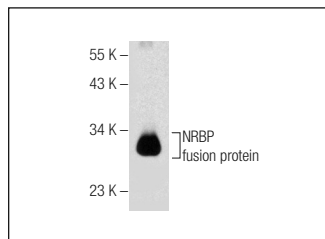
## RESEARCH USE

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



NRBP (H-40): sc-292613. Western blot analysis of human recombinant NRBP fusion protein.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.