

# FNBP4 (N-12): sc-103502

## BACKGROUND

FNBP4 (formin binding protein 4), also known as FBP30 (formin-binding protein 30), is a 1,017 amino acid protein that contains 2 WW domains and binds to the Arg/Gly-rich-flanked Pro-rich domains of formin 1, possibly regulating formin 1 function. In response to DNA damage, FNBP4 is subject to post-translational phosphorylation, probably by ATM or ATR. The gene encoding FNBP4 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

## REFERENCES

1. Sudol, M., et al. 1995. Characterization of a novel protein-binding module—the WW domain. *FEBS Lett.* 369: 67-71.
2. Depraetere, V., et al. 1999. WW domain-containing FBP-30 is regulated by p53. *Cell Death Differ.* 6: 883-889.
3. Bedford, M.T., et al. 2000. A novel pro-Arg motif recognized by WW domains. *J. Biol. Chem.* 275: 10359-10369.
4. Bedford, M.T., et al. 2000. Arginine methylation inhibits the binding of proline-rich ligands to Src homology 3, but not WW, domains. *J. Biol. Chem.* 275: 16030-16036.
5. Macias, M.J., et al. 2002. WW and SH3 domains, two different scaffolds to recognize proline-rich ligands. *FEBS Lett.* 513: 30-37.
6. Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick Type C proteins depends on the adaptor complex AP-3. *J. Cell Sci.* 120: 3640-3652.

## CHROMOSOMAL LOCATION

Genetic locus: FNBP4 (human) mapping to 11p11.2; Fnbp4 (mouse) mapping to 2 E1.

## SOURCE

FNBP4 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of FNBP4 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-103502 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.

## APPLICATIONS

FNBP4 (N-12) is recommended for detection of FNBP4 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); non cross-reactive with other FNBP family members.

FNBP4 (N-12) is also recommended for detection of FNBP4 in additional species, including canine.

Suitable for use as control antibody for FNBP4 siRNA (h): sc-96663, FNBP4 siRNA (m): sc-105369, FNBP4 shRNA Plasmid (h): sc-96663-SH, FNBP4 shRNA Plasmid (m): sc-105369-SH, FNBP4 shRNA (h) Lentiviral Particles: sc-96663-V and FNBP4 shRNA (m) Lentiviral Particles: sc-105369-V.

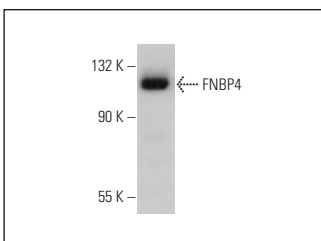
Molecular Weight of FNBP4: 110 kDa.

Positive Control: PC-12 cell lysate: sc-2250.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



FNBP4 (N-12): sc-103502. Western blot analysis of FNBP4 expression in PC-12 whole cell lysate.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.