

FNBP3 (D-20): sc-68080

BACKGROUND

FNBP3, Formin-binding protein 3, is a 957 amino acid protein encoded by the human gene PRPF40A. FNBP3 belongs to the PRPF40 family and contains five FF domains and two WW domains. Nuclear proteins harboring both WW and FF protein interaction modules bind to splicing factors as well as RNA polymerase II and may serve to link transcription with splicing. Through the WW domains, FNBP3 will bind to the Formin proline-rich regions. Also known as Pre-mRNA-processing factor 40 homolog A, FNBP3 binds to WASL/N-WASP (neuronal wiskott-aldrich syndrome protein) complex and suppresses its translocation from the nucleus to the cytoplasm, thereby inhibiting its cytoplasmic function. FNBP3 is widely expressed in most tissues and is localized to the nuclear speckles.

REFERENCES

1. Faber, P.W., et al. 1998. Huntingtin interacts with a family of WW domain proteins. *Hum. Mol. Genet.* 7: 1463-1474.
2. Scanlan, M.J., et al. 1999. Antigens recognized by autologous antibody in patients with renal-cell carcinoma. *Int. J. Cancer* 83: 456-464.
3. Allen, M., et al. 2002. The structure of an FF domain from human HYPA/FBP11. *J. Mol. Biol.* 323: 411-416.
4. Katoh, M. and Katoh, M. 2003. Identification and characterization of human FNBP3 gene in silico. *Int. J. Mol. Med.* 12: 651-656.
5. Lin, K.T., et al. 2004. The WW domain-containing proteins interact with the early spliceosome and participate in pre-mRNA splicing *in vivo*. *Mol. Cell. Biol.* 24: 9176-9185.
6. Jemth, P., et al. 2005. The structure of the major transition state for folding of an FF domain from experiment and simulation. *J. Mol. Biol.* 350: 363-378.
7. Kato, Y., et al. 2006. Expression and purification of active WW domains of FBP11/HYPA and FBP28/CA150. *Protein Pept. Lett.* 13: 197-201.

CHROMOSOMAL LOCATION

Genetic locus: PRPF40A (human) mapping to 2q23.3; Prpf40a (mouse) mapping to 2 C1.

SOURCE

FNBP3 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FNBP3 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-68080 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.

APPLICATIONS

FNBP3 (D-20) is recommended for detection of FNBP3 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).

FNBP3 (D-20) is also recommended for detection of FNBP3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FNBP3 siRNA (m): sc-62332, FNBP3 siRNA (h): sc-62331, FNBP3 shRNA Plasmid (m): sc-62332-SH, FNBP3 shRNA Plasmid (h): sc-62331-SH, FNBP3 shRNA (m) Lentiviral Particles: sc-62332-V and FNBP3 shRNA (h) Lentiviral Particles: sc-62331-V.

Molecular Weight of FNBP3: 109 kDa.

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.

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.