

3BP1 (T-17): sc-86270

BACKGROUND

3BP1 (SH3 domain-binding protein 1) is a 701 amino acid protein with sequence similarity to the COOH-terminal segment of Bcr. This similarity suggests 3BP1 has GTPase-activating protein (GAP) activity for Rac-related proteins. 3BP1 also binds to the SH3 domains of signal transduction pathway proteins, with preference for SRC-1 and GRB2. 3BP1 has also been found to inhibit PDGF-induced membrane ruffling mediated by Rac. Expressed as two isoforms produced by alternative splicing, 3BP1 contains one BAR domain and one Rho GAP domain.

REFERENCES

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2. Zhang, B. and Zheng, Y. 1998. Regulation of Rho A GTP hydrolysis by the GTPase-activating proteins p190, p50Rho GAP, Bcr, and 3BP-1. *Biochemistry* 37: 5249-5257.
3. Västrik, I., Eickholt, B.J., Walsh, F.S., Ridley, A. and Doherty, P. 1999. SEMA3A-induced growth-cone collapse is mediated by Rac 1 amino acids 17-32. *Curr. Biol.* 9: 991-998.
4. So, C.W., So, C.K., Cheung, N., Chew, S.L., Sham, M.H. and Chan, L.C. 2000. The interaction between EEN and Abi-1, two MLL fusion partners, and synaptojanin and dynamin: implications for leukaemogenesis. *Leukemia* 14: 594-601.
5. Scott, M.P., Zappacosta, F., Kim, E.Y., Annan, R.S. and Miller, W.T. 2002. Identification of novel SH3 domain ligands for the Src family kinase Hck. Wiskott-Aldrich syndrome protein (WASP), WASP-interacting protein (WIP), and ELMO1. *J. Biol. Chem.* 277: 28238-28246.

CHROMOSOMAL LOCATION

Genetic locus: SH3BP1 (human) mapping to 22q13.1; Sh3bp1 (mouse) mapping to 15 E1.

SOURCE

3BP1 (T-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of 3BP1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86270 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

3BP1 (T-17) is recommended for detection of 3BP1 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).

3BP1 (T-17) is also recommended for detection of 3BP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for 3BP1 siRNA (h): sc-77021, 3BP1 siRNA (m): sc-108929, 3BP1 shRNA Plasmid (h): sc-77021-SH, 3BP1 shRNA Plasmid (m): sc-108929-SH, 3BP1 shRNA (h) Lentiviral Particles: sc-77021-V and 3BP1 shRNA (m) Lentiviral Particles: sc-108929-V.

Molecular Weight of 3BP1 isoform 1: 76 kDa.

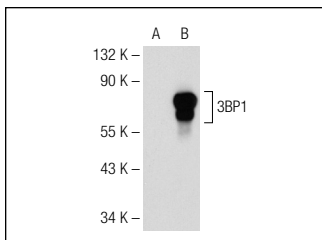
Molecular Weight of 3BP1 isoform 2: 51 kDa.

Positive Controls: 3BP1 (m): 293T Lysate: sc-117985, 3BP1 (h): 293T Lysate: sc-174773 or HeLa whole cell lysate: sc-2200.

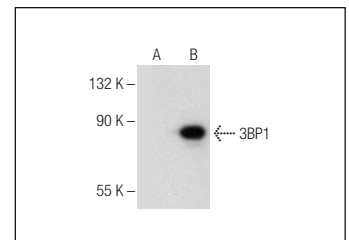
RECOMMENDED SECONDARY REAGENTS

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



3BP1 (T-17): sc-86270. Western blot analysis of 3BP1 expression in non-transfected: sc-117752 (A) and mouse 3BP1 transfected: sc-117985 (B) 293T whole cell lysates.



3BP1 (T-17): sc-86270. Western blot analysis of 3BP1 expression in non-transfected: sc-117752 (A) and human 3BP1 transfected: sc-174773 (B) 293T whole cell lysates.

PROTOCOLS

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