

# 3BP1 (D-9): sc-376192

## 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 RhoA GTP hydrolysis by the GTPase-activating proteins p190, p50RhoGAP, 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 Rac1 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 ELM01. *J. Biol. Chem.* 277: 28238-28246.

## CHROMOSOMAL LOCATION

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

## SOURCE

3BP1 (D-9) is a mouse monoclonal antibody raised against amino acids 107-194 mapping within an internal region of 3BP1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

3BP1 (D-9) is available conjugated to agarose (sc-376192 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376192 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376192 PE), fluorescein (sc-376192 FITC), Alexa Fluor® 488 (sc-376192 AF488), Alexa Fluor® 546 (sc-376192 AF546), Alexa Fluor® 594 (sc-376192 AF594) or Alexa Fluor® 647 (sc-376192 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376192 AF680) or Alexa Fluor® 790 (sc-376192 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

3BP1 (D-9) is recommended for detection of 3BP1 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).

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.

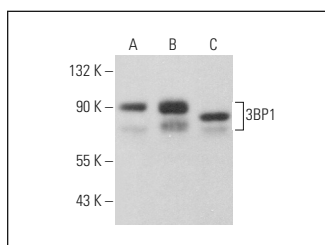
Molecular Weight of 3BP1 isoform 2: 51 kDa.

Positive Controls: 3BP1 (m): 293T Lysate: sc-117985, RAW 264.7 whole cell lysate: sc-2211 or A-431 whole cell lysate: sc-2201.

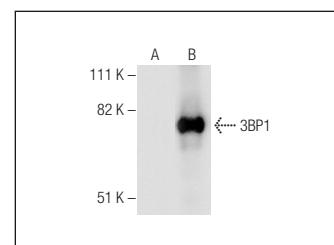
## RECOMMENDED SUPPORT REAGENTS

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



3BP1 (D-9): sc-376192. Western blot analysis of 3BP1 expression in Hep G2 (A), A-431 (B) and RAW 264.7 (C) whole cell lysates.



3BP1 (D-9): sc-376192. Western blot analysis of 3BP1 expression in non-transfected: sc-117752 (A) and mouse 3BP1 transfected: sc-117985 (B) 293T whole cell lysates.

## 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.