SANTA CRUZ BIOTECHNOLOGY, INC.

3BP2 (C-19): sc-8897



BACKGROUND

3BP2 is a Syk family kinase-interacting protein (SKIP) that is expressed in spleen and peripheral blood leukocytes. 3BP2 was originally characterized as an Abl SH3-interacting protein, as it contains a single proline-rich domain and an SH2 domain, consistent with other adaptor molecules. In Jurkat T cells transfected with 3BP2, stimulation of T cell receptors (TCR) rapidly induces the redistribution of 3BP2 from the cytoplasm to the membrane, where it associates with the TCR/protein tyrosine kinase complexes. Through this translocation, 3BP2 is able to selectively bind to Flt3/Flk2 receptors and to the phosphorylated Syk, Lat and ZAP-70 proteins. In T lymphocytes, the overexpression of 3BP2, specifically the overexpression of the SH2 and proline rich domains, is sufficient to induce the activation results in the upregulation of the IL-2 gene promoter and suggests a role for 3BP2 in mediating T cell signaling.

CHROMOSOMAL LOCATION

Genetic locus: SH3BP2 (human) mapping to 4p16.3; Sh3bp2 (mouse) mapping to 5 B2.

SOURCE

3BP2 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of 3BP2 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-8897 P, (100 μ g 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

3BP2 (N-18) is recommended for detection of 3BP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 3BP2 siRNA (h): sc-40289, 3BP2 siRNA (m): sc-40290, 3BP2 shRNA Plasmid (h): sc-40289-SH, 3BP2 shRNA Plasmid (m): sc-40290-SH, 3BP2 shRNA (h) Lentiviral Particles: sc-40289-V and 3BP2 shRNA (m) Lentiviral Particles: sc-40290-V.

Molecular Weight (predicted) of 3BP2 isoforms: 62/11/65 kDa.

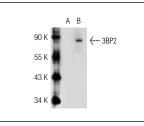
Molecular Weight (observed) of 3BP2: 65-80 kDa.

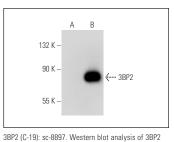
Positive Controls: 3BP2 (h): 293T Lysate: sc-113954, 3BP2 (m): 293T Lysate: sc-117986 or A-431 whole cell lysate: sc-2201.

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





expression in non-transfected: sc-117752 (A) and mouse 3BP2 transfected: sc-117986 (B) 293T whole

3BP2 (C-19): sc-8897. Western blot analysis of 3BP2 expression in non-transfected: sc-117752 (\pmb{A}) and human 3BP2 transfected: sc-113954 (\pmb{B}) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

 Sada, K., et al. 2002. Regulation of Fc ε RI-mediated degranulation by an adaptor protein 3BP2 in rat basophilic leukemia RBL-2H3 cells. Blood 100: 2138-2144.

cell lysates

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.

MONOS Satisfation Guaranteed

Try **3BP2 (C-5): sc-166459** or **3BP2 (C-11): sc-377020**, our highly recommended monoclonal aternatives to 3BP2 (C-19).