SANTA CRUZ BIOTECHNOLOGY, INC.

# BAM32 (C-13): sc-46789

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*The Power to Question*

## BACKGROUND

B cell adapter molecule (BAM32) is also designated dual adapter for phosphotyrosine and 3-phosphotyrosine and 3-phosphoinositide (DAPP1) or B lymphocyte adapter protein. BAM32 is a B cell-associated adapter that is crucial for B cell antigen receptor signaling regulation. BAM32 interacts with PtdIns and PLC g2 and, upon B cell activation, the protein is phosphorylated on tyrosine residues. It is a mainly cytoplasmic protein that can translocate to the cell membrane after cell stimulation. BAM32, which contains one PH domain and one SH2 domain, is primarily expressed in placenta and lung tissues, but can also be detected in heart, liver, pancreas and brain.

## REFERENCES


1. Ferguson, K.M., Kavran, J.M., Sankaran, V.G., Fournier, E., Isakoff, S.J., Skolnik, E.Y. and Lemmon, M.A. 2000. Structural basis for discrimination of 3-phosphoinositides by pleckstrin homology domains. Mol. Cell 6: 373-384.
2. Niiro, H. and Clark, E.A. 2003. Branches of the B cell antigen receptor pathway are directed by protein conduits BAM32 and Carma1. Immunity 19: 637-640.
3. Fournier, E., Isakoff, S.J., Ko, K., Cardinale, C.J., Inghirami, G.G., Li, Z., Curotto de Lafaille, M.A. and Skolnik, E.Y. 2003. The B cell SH2/PH domain-containing adaptor BAM32/DAPP1 is required for T cell-independent II antigen responses. Curr. Biol. 13: 1858-1866.
4. Niiro, H., Allam, A., Stoddart, A., Brodsky, F.M., Marshall, A.J. and Clark, E.A. 2004. The B lymphocyte adaptor molecule of 32 kDa (BAM32) regulates B cell antigen receptor internalization. J. Immunol. 173: 5601-5609.
5. Allam, A., Niiro, H., Clark, E.A. and Marshall, A.J. 2004. The adaptor protein BAM32 regulates Rac1 activation and Actin remodeling through a phosphorylation-dependent mechanism. J. Biol. Chem. 279: 39775-39782.
6. Allam, A., Marshall, A.J. 2005. Role of the adaptor proteins BAM32, TAPP1 and TAPP2 in lymphocyte activation. Immunol. Lett. 97: 7-17.


## CHROMOSOMAL LOCATION

Genetic locus: DAPP1 (human) mapping to 4q23; Dapp1 (mouse) mapping to 3 G3.

## SOURCE

BAM32 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BAM32 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-46789 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

BAM32 (C-13) is recommended for detection of BAM32 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).

BAM32 (C-13) is also recommended for detection of BAM32 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for BAM32 siRNA (h): sc-60241, BAM32 siRNA (m): sc-60242, BAM32 shRNA Plasmid (h): sc-60241-SH, BAM32 shRNA Plasmid (m): sc-60242-SH, BAM32 shRNA (h) Lentiviral Particles: sc-60241-V and BAM32 shRNA (m) Lentiviral Particles: sc-60242-V.

Molecular Weight of BAM32: 32 kDa.

Positive Controls: U-698-M whole cell lysate: sc-364799 or JEG-3 whole cell lysate: sc-364255.

## 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.