SANTA CRUZ BIOTECHNOLOGY, INC.

BAM32 (4H9): sc-130559

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

B cell adapter molecule (BAM32) is also designated a 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 γ2 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 kilodaltons (BAM32) regulates B cell antigen receptor internalization. J. Immunol. 173: 5601-5609.

CHROMOSOMAL LOCATION

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

SOURCE

BAM32 (4H9) is a mouse monoclonal antibody raised against recombinant BAM32 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BAM32 (4H9) is available conjugated to agarose (sc-130559 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-130559 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-130559 PE), fluorescein (sc-130559 FITC), Alexa Fluor® 488 (sc-130559 AF488), Alexa Fluor® 546 (sc-130559 AF546), Alexa Fluor® 594 (sc-130559 AF594) or Alexa Fluor® 647 (sc-130559 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-130559 AF680) or Alexa Fluor® 790 (sc-130559 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

BAM32 (4H9) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

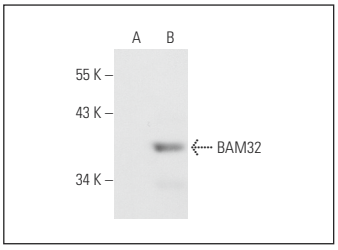
Molecular Weight of BAM32: 32 kDa.

Positive Controls: BAM32 (h2): 293T Lysate: sc-174819, U-698-M whole cell lysate: sc-364799 or JEG-3 whole cell lysate: sc-364255.

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).

DATA



BAM32 (4H9): sc-130559. Western blot analysis of BAM32 expression in non-transfected: sc-117752 (**A**) and human BAM32 transfected: sc-174819 (**B**) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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

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