

BAM32 (E-10): sc-133166

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 γ 2 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., et al. 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., et al. 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., et al. 2004. The B lymphocyte adaptor molecule of 32 kilodaltons (BAM32) regulates B cell antigen receptor internalization. *J. Immunol.* 173: 5601-5609.
5. Allam, A., et al. 2004. The adaptor protein BAM32 regulates Rac 1 activation and Actin remodeling through a phosphorylation-dependent mechanism. *J. Biol. Chem.* 279: 39775-39782.

CHROMOSOMAL LOCATION

Genetic locus: DAPP1 (human) mapping to 4q23.

SOURCE

BAM32 (E-10) is a mouse monoclonal antibody raised against amino acids 1-280 representing full length BAM32 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BAM32 (E-10) is available conjugated to agarose (sc-133166 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133166 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133166 PE), fluorescein (sc-133166 FITC), Alexa Fluor® 488 (sc-133166 AF488), Alexa Fluor® 546 (sc-133166 AF546), Alexa Fluor® 594 (sc-133166 AF594) or Alexa Fluor® 647 (sc-133166 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133166 AF680) or Alexa Fluor® 790 (sc-133166 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

BAM32 (E-10) is recommended for detection of BAM32 of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 BAM32 siRNA (h): sc-60241, BAM32 shRNA Plasmid (h): sc-60241-SH and BAM32 shRNA (h) Lentiviral Particles: sc-60241-V.

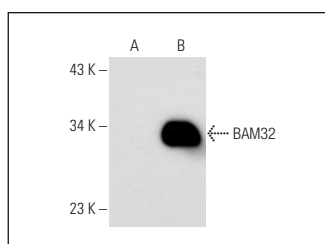
Molecular Weight of BAM32: 32 kDa.

Positive Controls: BAM32 (h): 293T Lysate: sc-113815, JEG-3 whole cell lysate or U-698-M whole cell lysate: sc-364799.

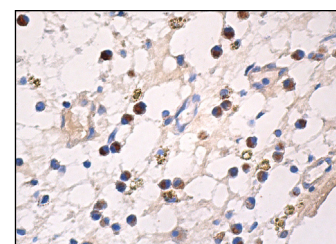
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



BAM32 (E-10): sc-133166. Western blot analysis of BAM32 expression in non-transfected: sc-117752 (A) and human BAM32 transfected: sc-113815 (B) 293T whole cell lysates.



BAM32 (E-10): sc-133166. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing cytoplasmic staining of subset of hematopoietic cells.

SELECT PRODUCT CITATIONS

1. Zhang, X., et al. 2017. Quantitative tyrosine phosphoproteomics of epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor-treated lung adenocarcinoma cells reveals potential novel biomarkers of therapeutic response. *Mol. Cell. Proteomics* 16: 891-910.

STORAGE

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