# BAM32 (h): 293T Lysate: sc-113815



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. BAM32 is a B cell-associated adapter that is crucial for B cell antigen receptor signaling regulation. BAM32 interacts with PtdIns and PLC  $\gamma 2$ , 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**

- 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.
- 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.
- 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 domaincontaining adaptor BAM32/DAPP1 is required for T cell-independent II antigen responses. Curr. Biol. 13: 1858-1866.
- 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.
- 5. Allam, A., Niiro, H., Clark, E.A. and Marshall, A.J. 2004. The adaptor protein BAM32 regulates Rac 1 activation and Actin remodeling through a phosphorylation-dependent mechanism. J. Biol. Chem. 279: 39775-39782.
- Allam, A. and 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.

## **PRODUCT**

BAM32 (h): 293T Lysate represents a lysate of human BAM32 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **APPLICATIONS**

BAM32 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive BAM32 antibodies. Recommended use: 10-20  $\mu$ l per lane.

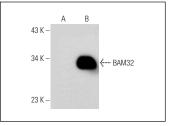
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

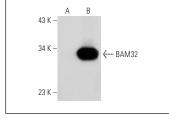
BAM32 (E-10): sc-133166 is recommended as a positive control antibody for Western Blot analysis of enhanced human BAM32 expression in BAM32 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **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 (UW32): sc-73653. Western blot analysis of BAM32 expression in non-transfected: sc-117752 (A) and human BAM32 transfected: sc-113815 (B) 293T whole cell lysates.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com