SANTA CRUZ BIOTECHNOLOGY, INC.

BCAP (T-12): sc-133362

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BIOTECHNOLOGY

The Power to Question

BACKGROUND

B cell adaptor for phosphoinositide 3-kinase (BCAP) is a tyrosine kinase substrate that bridges B cell receptor (BCR) associated kinases to the PIK3 pathway. Syk, Btk, or Lyn-dependent tyrosine phosphorylation of BCAP, provides binding sites for the p85 subunit of PIK3. BCAP mRNA is present in mouse spleen, thymus, liver, lung, macrophage, and B cell lines. Human BCAP maps to chromosome 10q24.2.

REFERENCES

1. Okada, T., et al. 2000. BCAP: the tyrosine kinase substrate that connects B cell receptor to phosphoinositide 3-kinase activation. Immunity 13: 817-827.

2. Inabe, K., et al. 2002. Tyrosine phosphorylation of B cell adaptor for phosphoinositide 3-kinase is required for Akt activation in response to CD19 engagement. Blood 99: 584-589.

3. Yamazaki, T., et al. 2002. Essential immunoregulatory role for BCAP in B cell development and function. J. Exp. Med. 195: 535-545.

4. Yamazaki, T., et al. 2003. Contribution of BCAP to maintenance of mature B cells through c-Rel. Nat. Immunol. 4: 780-786.

5. Battersby, A., et al. 2003. Isolation of proteins that interact with the signal transduction molecule Dof and identification of a functional domain conserved between Dof and vertebrate BCAP. J. Mol. Biol. 329: 479-493.

6. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607942. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

7. MacFarlane, A.W., et al. 2008. Enhanced NK-cell development and function in BCAP-deficient mice. Blood 112: 131-140.

8. LocusLink Report (LocusID: 118788). http://www.ncbi.nlm.nih.gov/LocusLink

CHROMOSOMAL LOCATION

Genetic locus: PIK3AP1 (human) mapping to 10q24.1; Pik3ap1 (mouse) mapping to 19 C3.

SOURCE

BCAP (T-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of BCAP of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133362 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

BCAP (T-12) is recommended for detection of BCAP isoforms 1-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BCAP (T-12) is also recommended for detection of BCAP isoforms 1-3 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for BCAP siRNA (h): sc-44681, BCAP siRNA (m): sc-44682, BCAP shRNA Plasmid (h): sc-44681-SH, BCAP shRNA Plasmid (m): sc-44682-SH, BCAP shRNA (h) Lentiviral Particles: sc-44681-V and BCAP shRNA (m) Lentiviral Particles: sc-44682-V.

Molecular Weight of BCAP: 70-100 kDa.

Positive controls: PC-12 cell lysate: sc-2250.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA
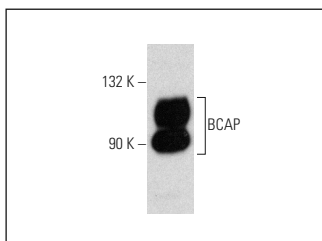
BCAP (T-12): sc-133362. Western blot analysis of BCAP expression in PC-12 whole cell lysate.

RESEARCH USE

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

MONOS
Satisfation
Guaranteed

Try **BCAP (E-5): sc-515498**, our highly recommended monoclonal alternative to BCAP (T-12).