

BCAP (S-15)-R: sc-30601-R

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 10q24.1.

REFERENCES

- Okada, T., et al. 2000. BCAP: the tyrosine kinase substrate that connects B cell receptor to phosphoinositide 3-kinase activation. *Immunity* 13: 817-827.
- 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.
- Yamazaki, T., et al. 2002. Essential immunoregulatory role for BCAP in B cell development and function. *J. Exp. Med.* 195: 535-545.
- Yamazaki, T., et al. 2003. Contribution of BCAP to maintenance of mature B cells through c-Rel. *Nat. Immunol.* 4: 780-786.
- 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.
- 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/>
- 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 (S-15)-R 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 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-30601 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.

PROTOCOLS

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

APPLICATIONS

BCAP (S-15)-R is recommended for detection of BCAP 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).

BCAP (S-15)-R is also recommended for detection of BCAP in additional species, including equine, canine, bovine, porcine and avian.

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.

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) 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.

SELECT PRODUCT CITATIONS

- Büchse, T., et al. 2011. CIN85 interacting proteins in B cells-specific role for SHIP-1. *Mol. Cell. Proteomics* 10: M110.006239.

RESEARCH USE

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