SANTA CRUZ BIOTECHNOLOGY, INC.

Slap (N-19): sc-1216

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The Power to Question

BACKGROUND

The Src homology 3 (SH3) region is a small protein domain of approximately 60 amino acids present in a large group of proteins. In general, it exists in association with catalytic domains, as in the nonreceptor protein-tyrosine kinases and phospholipase C-γ; within structural proteins, such as spectrin or Myosin; and in small adapter proteins, such as Crk and GRB2. SH3 domains are often accompanied by SH2 domains of 100 amino acids, which bind to tyrosine-phosphorylated regions of target proteins, frequently linking activated growth factors to putative signal transduction proteins. The functions of SH3 domains are not as well defined. Deletion or mutation of SH3 domains generally activate the transforming potential of nonreceptor tyrosine kinases, suggesting that SH3 mediates negative regulation of an intrinsic transforming activity. 3BP1 has been identified as a protein with a high affinity proline-rich binding site for the SH3 domain of c-Abl p120. A similar putative adapter protein, designated Slap, for Src-like adapter protein, has been cloned. Slap contains a single SH2 and SH3 domain that exhibits homology with those from members of the Src kinase family. The N- and C-termini, however, are unique.

REFERENCES

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2. Ellis, C., et al. 1990. Phosphorylation of GAP and GAP-associated proteins by transforming and mitogenic tyrosine kinases. Nature 343: 377-381.
3. Morrison, D.K., et al. 1990. Platelet-derived growth factor (PDGF)-dependent association of phospholipase C-γ with the PDGF receptor signaling complex. Mol. Cell. Biol. 10: 2359-2366.
4. Cantley, L.C., et al. 1991. Oncogenes and signal transduction. Cell 64: 281-302.
5. Koch, C.A., et al. 1991. SH2 and SH3 domains: elements that control interactions of cytoplasmic signaling proteins. Science 252: 669-674.
6. Cicchetti, P., et al. 1992. Identification of a protein that binds to the SH3 region of Abl and is similar to Bcr and GAP-Rho. Science 257: 803-806.
7. Ren, R., et al. 1993. Identification of a ten amino acid proline-rich SH3 binding site. Science 259: 1157-1161.
8. Ravichandran, K.S., et al. 1993. Interaction of Shc with the ζ chain of the T cell receptor upon T cell activation. Science 262: 902-905.

CHROMOSOMAL LOCATION

Genetic locus: SLA (human) mapping to 8q24; Sla (mouse) mapping to 15 D2.

SOURCE

Slap (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Slap of mouse origin.

PROTOCOLS

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

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-1216 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Slap (N-19) is recommended for detection of Slap of mouse and rat 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).

Suitable for use as control antibody for Slap siRNA (m): sc-40972.

Molecular Weight of Slap: 34 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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