

# Slap (2.11): sc-135802

## 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- $\gamma$ ; 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

1. Ullrich, A. and Schlessinger, J. 1990. Signal transduction by receptors with tyrosine kinase activity. *Cell* 61: 203-212.
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- $\gamma$  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  $\zeta$  chain of the T cell receptor upon T cell activation. *Science* 262: 902-905.

## CHROMOSOMAL LOCATION

Genetic locus: SLA (human) mapping to 8q24.22.

## SOURCE

Slap (2.11) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 6-20 of Slap of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Slap (2.11) is recommended for detection of Slap of 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).

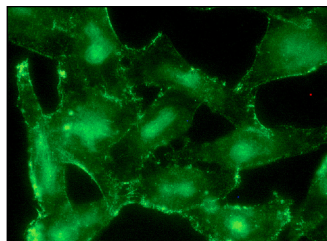
Suitable for use as control antibody for Slap siRNA (h): sc-40971, Slap shRNA Plasmid (h): sc-40971-SH and Slap shRNA (h) Lentiviral Particles: sc-40971-V.

Molecular Weight of Slap: 34 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Slap (2.11): sc-135802. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

## 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. Not for resale.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.