

PAL (N-17): sc-9536

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 that bind to tyrosine-phosphorylated regions of target proteins, frequently linking activated growth factors to putative signal transduction proteins. Deletion or mutation of SH3 domains generally activates the transforming potential of nonreceptor tyrosine kinases, suggesting that SH3 mediates negative regulation of an intrinsic transforming activity. PAL (protein expressed in activated lymphocytes) is an SH2 domain-binding adapter protein that is expressed in actively dividing and proliferating cells, suggesting a role for PAL in governing cell cycle progression.

REFERENCES

1. Ullrich, A. and Schlessinger, J. 1990. Signal transduction by receptors with tyrosine kinase activity. *Cell* 61: 203-212.
2. Ellis, C., Moran, M., McCormick, F. and Pawson, T. 1990. Phosphorylation of GAP and GAP-associated proteins by transforming and mitogenic tyrosine kinases. *Nature* 343: 377-381.
3. Morrison, D.K., Kaplan, D.R., Rhee, S.G. and Williams, L.T. 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., Auger, K.R., Carpenter, C., Duckworth, B., Graziani, A., Kapeller, R. and Soltoff, S. 1991. Oncogenes and signal transduction. *Cell* 64: 281-302.
5. Koch, C.A., Anderson, D., Moran, M.F., Ellis, C. and Pawson, T. 1991. SH2 and SH3 domains: elements that control interactions of cytoplasmic signaling proteins. *Science* 252: 669-674.

CHROMOSOMAL LOCATION

Genetic locus: Shcbp1 (mouse) mapping to 8 A1.2.

SOURCE

PAL (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PAL of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9536 P, (100 μ g 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

PAL (N-17) is recommended for detection of PAL of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 PAL siRNA (m): sc-40970, PAL shRNA Plasmid (m): sc-40970-SH and PAL shRNA (m) Lentiviral Particles: sc-40970-V.

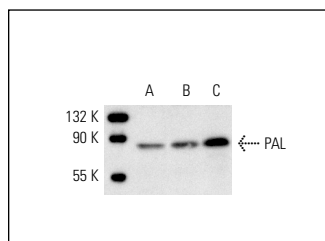
Molecular Weight of PAL: 75 kDa.

Positive Controls: WEHI-3 cell lysate: sc-3815, BYDP whole cell lysate or WRL19L cell lysate: sc-3805.

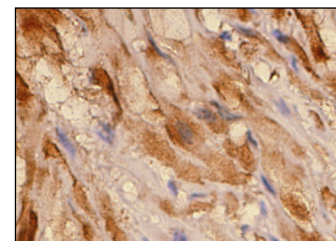
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



PAL (N-17): sc-9536. Western blot analysis of PAL expression in WEHI-3 (A), BYDP (B) and WRL19L (C) whole cell lysates.



PAL (N-17): sc-9536. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse lymph node showing cytoplasmic localization.

RESEARCH USE

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



Try **PAL (E-9): sc-514172**, our highly recommended monoclonal alternative to PAL (N-17).