



α PIX (C-14): sc-10925

BACKGROUND

The serine/threonine kinase, p21 activated kinase (PAK), is a downstream effector of the small GTPases Cdc42 and Rac. PAK associates with Nck, the p85 and p110 subunits of PI3-kinase, and PIX (PAK-interacting exchange factor) in a focal complex. The binding of PIX is necessary for the localization and activation of PAK in the Cdc42 to Rac signaling pathway, and this binding occurs through the high affinity of the N-terminal SH3 domain of PIX for a conserved proline rich PAK sequence. PIX exists as two isoforms, α and β and both are highly expressed in heart, muscle, and thymus tissues of human and rat. α PIX is phosphorylated via PDGF and EphB2 receptor signaling pathways or through association with PI3-kinase. The α PIX isoform predominantly acts as a guanine nucleotide exchange factor (GEF) on Rac, which may mediate lamellipodia formation.

REFERENCES

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SOURCE

α PIX (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of α PIX of human origin.

RESEARCH USE

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

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-10925 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

α PIX (C-14) is recommended for detection of α PIX 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).

Molecular Weight of α PIX: 75 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or A-673 nuclear extract: sc-2128.

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.

SELECT PRODUCT CITATIONS

- Papakonstanti, E., et al. 2002. Association of PI-3 kinase with PAK1 leads to actin phosphorylation and cytoskeletal reorganization. *Mol. Cell. Biol.* 13: 2946-2962.

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.