

p-RKIP (hSer 153): sc-32623

BACKGROUND

Raf kinase inhibitory protein (RKIP, PEBP) is a modulator of the Raf/MAPK signaling cascade and a suppressor of metastatic cancer. RKIP inhibits MAPK by preventing association of Raf-1 and p21-activated kinase (PAK), and blocking phosphorylation of the Raf-1 kinase domain by PAK and Src kinases. After G protein receptor stimulation, RKIP can dissociate Raf-1 and associate with GRK 2, thereby blocking GRK 2 activity. This switch is triggered by protein kinase C (PKC)-dependent phosphorylation of the RKIP on Serine 153. RKIP Serine 153 phosphorylation by PKC in response to phorbol ester or epidermal growth factor causes release of RKIP from Raf-1. RKIP antagonizes the signal transduction pathways that mediate the activation of NF κ B in response to stimulation with TNF- α or interleukin-1 β .

REFERENCES

1. Yeung, K., et al. 1999. Suppression of Raf-1 kinase activity and MAP kinase signalling by RKIP. *Nature* 401: 173-177.
2. Yeung, K., et al. 2000. Mechanism of suppression of the Raf/MEK/extracellular signal-regulated kinase pathway by the Raf kinase inhibitor protein. *Mol. Cell. Biol.* 20: 3079-3085.

CHROMOSOMAL LOCATION

Genetic locus: PEBP1 (human) mapping to 12q24.23.

SOURCE

p-RKIP (hSer 153) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 153 phosphorylated RKIP of human 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-32623 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-RKIP (hSer 153) is recommended for detection of Ser 153 phosphorylated RKIP of human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-RKIP (hSer 153) is also recommended for detection of correspondingly phosphorylated RKIP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RKIP siRNA (h): sc-36430, RKIP shRNA Plasmid (h): sc-36430-SH and RKIP shRNA (h) Lentiviral Particles: sc-36430-V.

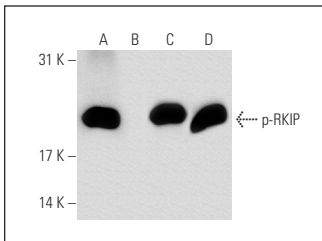
Molecular Weight of p-RKIP: 23 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

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 B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Western blot analysis of RKIP phosphorylation in untreated (A, C) and lambda protein phosphatase treated (B, D) HL-60 whole cell lysates. Antibodies tested include p-RKIP (hSer 153): sc-32623 (A, B) and RKIP (FL-187): sc-28837 (C, D).

SELECT PRODUCT CITATIONS

1. Kim, S.O., et al. 2012. Raf-1 kinase inhibitory protein (RKIP) mediates ethanol-induced sensitization of secretagogue signaling in pancreatic acinar cells. *J. Biol. Chem.* 287: 33377-33388.

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.

PROTOCOLS

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


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Guaranteed

Try **p-RKIP (80.Ser 153): sc-135779**, our highly recommended monoclonal alternatives to p-RKIP (hSer 153).