

p70 S6 kinase β (164CT21.2.2): sc-517350

BACKGROUND

In studies to elucidate key regulatory pathways in signal transduction, several protein Serine/Threonine (Ser/Thr) kinases have been identified, including two distinct families of 40S ribosomal protein S6 Ser/Thr kinases present in somatic animal cells, designated p70 S6 kinase and p90 Rsk kinase. p90 Rsk kinase is maximally activated within minutes of addition of growth factors or phorbol ester to cultured cells followed by activation of p70 S6 kinase. Both enzymes are regulated by Serine/Threonine phosphorylation, suggesting that specific kinases may exist upstream in the signaling pathway that regulate these kinases. In fact, evidence suggests that one such family of activating enzymes includes the members of the ERK MAP kinase family. The ERK MAP kinases are, in turn, regulated by phosphorylation at Threonine and Tyrosine residues by a protein kinase designated MEK.

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CHROMOSOMAL LOCATION

Genetic locus: RPS6KB2 (human) mapping to 11q13.2; Rps6kb2 (mouse) mapping to 19 A.

SOURCE

p70 S6 kinase β (164CT21.2.2) is a mouse monoclonal antibody raised against a recombinant protein corresponding to p70 S6 kinase β of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p70 S6 kinase β (164CT21.2.2) is recommended for detection of p70 S6 kinase β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for p70 S6 kinase β siRNA (h): sc-39209, p70 S6 kinase β siRNA (m): sc-39210, p70 S6 kinase β shRNA Plasmid (h): sc-39209-SH, p70 S6 kinase β shRNA Plasmid (m): sc-39210-SH, p70 S6 kinase β shRNA (h) Lentiviral Particles: sc-39209-V and p70 S6 kinase β shRNA (m) Lentiviral Particles: sc-39210-V.

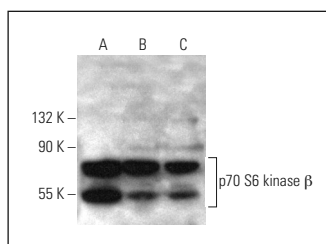
Molecular Weight of p70 S6 kinase β : 70 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



p70 S6 kinase β (164CT21.2.2): sc-517350. Western blot analysis of p70 S6 kinase β expression in MCF7 (A), NIH/3T3 (B) and HeLa (C) whole cell lysates.

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.