

p70S6K, Unactive

Recombinant full-length protein expressed in Sf9 cells

Catalog # R21-14H

Lot # J390-2

Product Description

Recombinant full-length human p70S6K was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag. The gene accession number is [NM_003161](#).

Gene Aliases

S6K; PS6K; S6K1; STK14A; RPS6KB1; p70-alpha; p70(S6K)-alpha

Formulation

Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.

Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

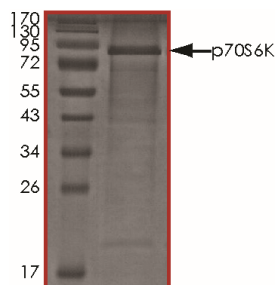
Scientific Background

p70S6K is responsible for the phosphorylation of 40S ribosomal protein S6 and is ubiquitously expressed in human adult tissues (1). p70S6K is activated by serum stimulation and this activation is inhibited by wortmannin and rapamycin. p70S6K activity undergoes changes in the cell cycle and increases 20-fold in G1 cells released from G0 (2). p70S6K activation requires sequential phosphorylations at proline-directed residues in the putative autoinhibitory pseudosubstrate domain, as well as threonine 389 a site phosphorylated by phosphoinositide-dependent kinase 1 (PDK-1).

References

1. Ferrari, S. et al: S6 phosphorylation and the p70s6k/p85s6k. Crit Rev Biochem Mol Biol. 1994;29(6):385-413. Review.
2. Edelmann, HM. Et al: Cell cycle regulation of p70 S6 kinase and p42/p44 mitogen-activated protein kinases in Swiss mouse 3T3 fibroblasts. J Biol Chem. 1996 Jan 12;271(2):963-71.

Purity



The purity of p70S6K was determined to be **>90%** by densitometry, approx. MW **76kDa**.

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Purity >90%

Concentration 0.1 µg/µl

Stability 1yr at -70°C from date of shipment

Storage & Shipping Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.