

Active p70S6K

CATALOG #: 7725-5, -100

LOT #: ---

SOURCE: Sf 9 cells

PURITY: 1 µq of p70S6K protein was subjected to SDS-PAGE and

Coomassie blue staining. The scan of the gel showed >90% purity of the p70S6K product, and the band was at \sim 76 kDa

SPECIFIC ACTIVITY: 89 nmol/min/mg

MOLECULAR WEIGHT: ~76 kDa.

PHYSICAL APPEARENCE: Recombinant protein in storage buffer (50 mM Tris-HCl, pH

7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM

EDTA, 0.1 mM PMSF, 25% glycerol).

STORAGE CONDITIONS: Store product frozen at or below -70°C. Stable for 1 year at -

70°C as undiluted stock. Aliquot to avoid repeated thawing and

freezing.

BACKGROUND DESCRIPTION: Activation of cell growth leads to the multiple phosphorylation of

40S ribosomal protein S6. The kinase responsible for controlling this event is termed p70S6K. p70S6K activation requires sequential phosphorylations at proline-directed residues in the putative autoinhibitory pseudosubstrate domain, as well as threonine 389. Threonine 229, a site in the catalytic loop is phosphorylated by phosphoinositide-dependent kinase 1 (PDK-1). Activation of p70S6K requires a phosphoinositide 3-kinase (PI3-K)-dependent signal(s).

ACTIVITY: 132 nmol phosphate incorporated into S6K substrate peptide

per minute per mg protein at 30°C for 15 minutes using a final

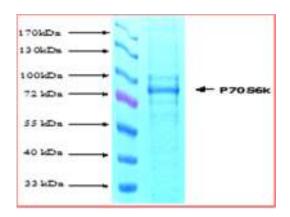
concentration of 50 µM ATP (0.83 µCi/assay).

USAGE: The product is intended for research use or for further

manufacture use. The product is not intended for human or

therapeutic use.

FOR RESEARCH USE ONLY! Not to be used in humans.



RELATED PRODUCTS:

- Akt activated cell lysate (Cat. No. 7036-1)
- Akt Inhibitor (Cat. No. 1701-1)
- Akt Inhibitor, Isozyme Selective (Cat. No. 1708-1)
- Akt negative control cell lysate (Cat. No. 7035-1)
- Active Akt1 (Cat. No. 7701-5, -100)
- Active Akt2 (Cat. No. 7702-5)
- Active Akt3 (Cat. No. 7703-5)
- Active PDK1 (Cat. No. 7706-5)
- Active SGK1 (Cat. No. 7748-5)
- Active Cont (Cat. 110. 1140-0)
- Active SGK2 (Cat. No. 7749-5)