

# Recombinant human S6K1/RPS6KB1 protein

Catalog Number: ATGP3741

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

1-525aa, Human

### UniProt No.

P23443

### NCBI Accession No.

NP\_003152

### Alternative Names

STK14A, Serine/threonine-protein kinase 14A, S6K-beta-1, S6K1, S6K, RPS6KB1, Ribosomal protein S6 kinase I, Ribosomal protein S6 kinase beta-1 isoform a, PS6K, P70S6K1, p70-S6K, p70-alpha, p70(S6K)-alpha, p70 S6KA, p70 S6 kinase alpha, p70 ribosomal S6 kinase alpha, 70 kDa ribosomal protein S6 kinase 1

## PRODUCT SPECIFICATION

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### Molecular Weight

60.2 kDa (533aa)

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 50mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.5M NaCl, 2mM DTT, 0.1mM PMSF

### Purity

> 85% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

RPS6KB1, also known as ribosomal protein S6 kinase beta-1 isoform a, is a serine/threonine kinase that acts downstream of PIP3 and phosphoinositide-dependent kinase-1 in the PI3 kinase pathway. Phosphorylation of S6

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induces protein synthesis at the ribosome. The phosphorylation of p70S6K at threonine 389 has been used as a hallmark of activation by mTOR and correlated with autophagy inhibition in various situations. However, several recent studies suggest that the activity of p70S6K plays a more positive role in the increase of autophagy. Recombinant human RPS6KB1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

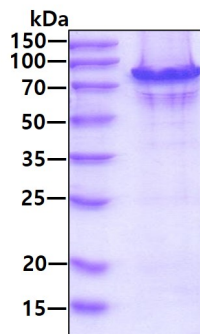
MRRRRRRRDGF YPAPDFRDRE AEDMAGVFDI DLDQPEDAGS EDELEEGGQL NESMDHGGVG PYELGMEHCE KFEISETSVN  
RGPEKIRPEC FELLRVLGKG GYGKVFQVRK VTGANTGKIF AMKVLKKAMI VRNAKDTAHT KAERNILEEV KHPFIVDLIY  
AFQTGGKLYL ILEYLSGGEL FMQLEREGIF MEDTACFYLA EISMALGHLH QKGIIYRDLK PENIMLNHQG HVKLTDFGLC  
KESIHGDTVT HTFCGTIEYM APEILMRS GH NRAVDWWSLG ALMYDMLTGA PPFTGENRKK TIDKILKCKL NLPPYLTQEA  
RDLLKLLKR NAASRLGAGP GDAGEVQAHP FFRHINWEEL LARKVEPPFK PLLQSEEDVS QFDSKFTRQT PVDSPDDSTL  
SESANQVFLG FTYVAPSVLE SVKEKFSFEP KIRSPRRFIG SPRTPVSPVK FSPGDFWGRG ASASTANPQT PVEYPMETSG  
IEQMDVTMSG EASAPLPIRQ PNSGPYKKQA FPMISKRPEH LRMNL<LEHHH HHH>

## General References

Grove JR., et al, (1991) Mol Cell Biol. 11:5541-5550.  
Ferrari S., et al, (1994) Crit Rev Biochem Mol Biol. 29:385-413.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.