

Product datasheet for TP317324M

OriGene Technologies, Inc.

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S6K1 (RPS6KB1) (NM_003161) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human ribosomal protein S6 kinase, 70kDa, polypeptide 1 (RPS6KB1),

100 µg

Species: Human Expression Host: HEK293T

Expression cDNA Clone or AA

>RC217324 representing NM_003161 Red=Cloning site Green=Tags(s)

Sequence:

MRRRRRDGFYPAPDFRDREAEDMAGVFDIDLDQPEDAGSEDELEEGGQLNESMDHGGVGPYELGMEHCE KFEISETSVNRGPEKIRPECFELLRVLGKGGYGKVFQVRKVTGANTGKIFAMKVLKKAMIVRNAKDTAHT KAERNILEEVKHPFIVDLIYAFQTGGKLYLILEYLSGGELFMQLEREGIFMEDTACFYLAEISMALGHLH QKGIIYRDLKPENIMLNHQGHVKLTDFGLCKESIHDGTVTHTFCGTIEYMAPEILMRSGHNRAVDWWSLG ALMYDMLTGAPPFTGENRKKTIDKILKCKLNLPPYLTQEARDLLKKLLKRNAASRLGAGPGDAGEVQAHP FFRHINWEELLARKVEPPFKPLLQSEEDVSQFDSKFTRQTPVDSPDDSTLSESANQVFLGFTYVAPSVLE SVKEKFSFEPKIRSPRRFIGSPRTPVSPVKFSPGDFWGRGASASTANPQTPVEYPMETSGIEQMDVTMSG

EASAPLPIRQPNSGPYKKQAFPMISKRPEHLRMNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 59 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Bioactivity: EMSA reaction (PMID: <u>27801893</u>)

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 003152

 Locus ID:
 6198

 UniProt ID:
 P23443

 RefSeq Size:
 5332

 Cytogenetics:
 17q23.1

 RefSeq ORF:
 1575

Synonyms: p70 S6KA; p70(S6K)-alpha; p70-alpha; p70-S6K; PS6K; S6K-beta-1; S6K1; STK14A

Summary: This gene encodes a member of the ribosomal S6 kinase family of serine/threonine kinases. The

encoded protein responds to mTOR (mammalian target of rapamycin) signaling to promote protein synthesis, cell growth, and cell proliferation. Activity of this gene has been associated with

human cancer. Alternatively spliced transcript variants have been observed. The use of

alternative translation start sites results in isoforms with longer or shorter N-termini which may differ in their subcellular localizations. There are two pseudogenes for this gene on chromosome

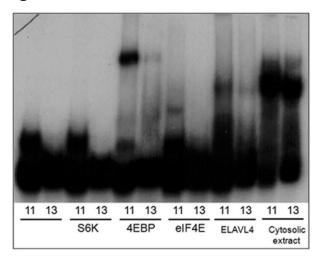
17. [provided by RefSeq, Jan 2013]

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Acute myeloid leukemia, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Insulin

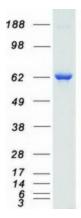
signaling pathway, mTOR signaling pathway, TGF-beta signaling pathway

Product images:



Audiograph of electrophoretic mobility shift assay using labeled RNA probes for the 11 and 13DNR DNR alleles, and purified candidate-binding proteins including S6K (OriGene [TP317324]). Results confirm the binding for 4E-BP, elF4E, and ELAVL4, seen as band upshift from the unlabeled oligos. Figure cited from Transl Psychiatry, PMID: 27801893





Coomassie blue staining of purified RPS6KB1 protein (Cat# [TP317324]). The protein was produced from HEK293T cells transfected with RPS6KB1 cDNA clone (Cat# [RC217324]) using MegaTran 2.0 (Cat# [TT210002]).