

Product datasheet for SC323348

OriGene Technologies, Inc.

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S6K1 (RPS6KB1) (NM_003161) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: S6K1 (RPS6KB1) (NM_003161) Human Untagged Clone

Tag: Tag Free Symbol: S6K1

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

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)



Fully Sequenced ORF:

>OriGene ORF sequence for NM_003161 edited ATGAGGCGACGAAGGAGGCGGGACGGCTTTTACCCAGCCCCGGACTTCCGAGACAGGGAA GAGGATGAGCTGGAGGAGGGGGGTCAGTTAAATGAAAGCATGGACCATGGGGGAGTTGGA CCATATGAACTTGGCATGGAACATTGTGAGAAATTTGAAATCTCAGAAACTAGTGTGAAC AGAGGGCCAGAAAAAATCAGACCAGAATGTTTTGAGCTACTTCGGGTACTTGGTAAAGGG GGCTATGGAAAGGTTTTTCAAGTACGAAAAGTAACAGGAGCAAATACTGGGAAAATATTT GCCATGATGGTGCTTAAAAAGGCAATGATAGTAAGAAATGCTAAAGATACAGCTCATACA AAAGCAGAACGGAATATTCTGGAGGAAGTAAAGCATCCCTTCATCGTGGATTTAATTTAT GCCTTTCAGACTGGTGGAAAACTCTACCTCATCCTTGAGTATCTCAGTGGAGGAGAACTA GAAATCTCCATGGCTTTGGGGCATTTACATCAAAAGGGGATCATCTACAGAGACCTGAAG CCGGAGAATATCATGCTTAATCACCAAGGTCATGTGAAACTAACAGACTTTGGACTATGC AAAGAATCTATTCATGATGGAACAGTCACACACACATTTTGTGGAACAATAGAATACATG GCCCCTGAAATCTTGATGAGAAGTGGCCACAATCGTGCTGTGGATTGGTGGAGTTTGGGA ACAATTGACAAAATCCTCAAATGTAAACTCAATTTGCCTCCCTACCTCACACAAGAAGCC AGAGATCTGCTTAAAAAGCTGCTGAAAAGAAATGCTGCTTCTCGTCTGGGAGCTGGTCCT GGGGACGCTGGAGAAGTTCAAGCTCATCCATTCTTTAGACACATTAACTGGGAAGAACTT CTGGCTCGAAAGGTGGAGCCCCCCTTTAAACCTCTGTTGCAATCTGAAGAGGATGTAAGT CAGTTTGATTCCAAGTTTACACGTCAGACACCTGTCGACAGCCCAGATGACTCAACTCTC AGTGAAAGTGCCAATCAGGTCTTTCTGGGTTTTACATATGTGGCTCCATCTGTACTTGAA AGTGTGAAAGAAAAGTTTTCCTTTGAACCAAAAATCCGATCACCTCGAAGATTTATTGGC AGCCCACGAACACCTGTCAGCCCAGTCAAATTTTCTCCTGGGGATTTCTGGGGAAGAGGT GCTTCGGCCAGCACAGCAAATCCTCAGACACCTGTGGAATACCCAATGGAAACAAGTGGC ATAGAGCAGATGGATGTGACAATGAGTGGGGAAGCATCGGCACCACTTCCAATACGACAG CCGAACTCTGGGCCATACAAAAAACAAGCTTTTCCCATGATCTCCAAACGGCCAGAGCAC CTGCGTATGAATCTATGA

Restriction Sites: Sgfl-Mlul
ACCN: NM_003161
Insert Size: 1578 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.



Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 003161.3</u>

 RefSeq Size:
 5368 bp

 RefSeq ORF:
 1578 bp

 Locus ID:
 6198

 UniProt ID:
 P23443

 Cytogenetics:
 17q23.1

Domains: pkinase, S_TK_X, TyrKc, S_TKc

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

MW: 59.1 kDa

Gene 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]

Transcript Variant: This variant (1) can initiate translation from two alternate in-frame AUG start codons. The isoform represented in this RefSeq (a, also known as p85 or alpha I) is derived from the first AUG start codon, and is the longest isoform. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the

transcript record were based on transcript alignments.