OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC323401

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; S6K-beta-1; S6K1; STK14A
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_003161, the custom clone sequence may differ by one or more nucleotides

ATGAGGCGACGAAGGAGGCGGGACGGCTTTTACCCAGCCCCGGACTTCCGAGACAGGGAAGCTGAGGACA
TGGCAGGAGTGTTTGACATAGACCTGGACCAGCCAGAGGACGCGGGCTCTGAGGATGAGCTGGAGGAGGG
GGGTCAGTTAAATGAAAGCATGGACCATGGGGGAGTTGGACCATATGAACTTGGCATGGAACATTGTGAG
AAATTTGAAATCTCAGAAACTAGTGTGAACAGAGGGCCAGAAAAAATCAGACCAGAATGTTTTGAGCTAC
TTCGGGTACTTGGTAAAGGGGGCTATGGAAAGGTTTTTCAAGTACGAAAAGTAACAGGAGCAAATACTGG
GAAAATATTTGCCATGAAGGTGCTTAAAAAGGCAATGATAGTAAGAAATGCTAAAGATACAGCTCATACA
AAAGCAGAACGGAATATTCTGGAGGAAGTAAAGCATCCCTTCATCGTGGATTTAATTTATGCCTTTCAGA
CTGGTGGAAAACTCTACCTCATCCTTGAGTATCTCAGTGGAGGAGAACTATTTATGCAGTTAGAAAGAGA
GGGAATATTTATGGAAGACACTGCCTGCTTTTACTTGGCAGAAATCTCCATGGCTTTGGGGCATTTACAT
CAAAAGGGGATCATCTACAGAGACCTGAAGCCGGAGAATATCATGCTTAATCACCAAGGTCATGTGAAAC
TAACAGACTTTGGACTATGCAAAGAATCTATTCATGATGGAACAGTCACACACACATTTTGTGGAACAAT
AGAATACATGGCCCCTGAAATCTTGATGAGAAGTGGCCACAATCGTGCTGTGGATTGGTGGAGTTTGGGA
GCATTAATGTATGACATGCTGACTGGAGCACCCCCATTCACTGGGGAGAATAGAAAGAAAACAATTGACA
AAATCCTCAAATGTAAACTCAATTTGCCTCCCTACCTCACACAAGAAGCCAGAGATCTGCTTAAAAAGCT
GCTGAAAAGAAATGCTGCTTCTCGTCTGGGAGCTGGTCCTGGGGACGCTGGAGAAGTTCAAGCTCATCCA
TTCTTTAGACACATTAACTGGGAAGAACTTCTGGCTCGAAAGGTGGAGCCCCCCTTTAAACCTCTGTTGC
AATCTGAAGAGGATGTAAGTCAGTTTGATTCCAAGTTTACACGTCAGACACCTGTCGACAGCCCAGATGA
CTCAACTCTCAGTGAAAGTGCCAATCAGGTCTTTCTGGGTTTTACATATGTGGCTCCATCTGTACTTGAA
AGTGTGAAAGAAAAGTTTTCCTTTGAACCAAAAATCCGATCACCTCGAAGATTTATTGGCAGCCCACGAA
CACCTGTCAGCCCAGTCAAATTTTCTCCTGGGGATTTCTGGGGAAGAGGTGCTTCGGCCAGCACAGCAAA
TCCTCAGACACCTGTGGAATACCCAATGGAAACAAGTGGCATAGAGCAGATGGATGTGACAATGAGTGGG
GAAGCATCGGCACCACTTCCAATACGACAGCCGAACTCTGGGCCATACAAAAAACAAGCTTTTCCCATGA
TCTCCAAACGGCCAGAGCACCTGCGTATGAATCTATGA

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_003161 unedited
CCCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCCCGGGATATCGTCGACCCACGCG
TCCGCGGACGCGTGGGTGGCGGCAGCGGCTGTGGTGGCTGCGGCGGGTCCGGGCCCATGAGGCGACGAAG
GAGGCGGGACGGCTTTTACCCAGCCCCGGACTTCCGAGACAGGGAAAGCTGAGGACATGGCAGGGAGTGT
TTGACATAGACCTGGACCAGCCCAGAGGACGCGGGGCTCTGAGGATGAACCTGAAGGAAGGGGGGTCAAT
TTAAATTGAAACCTTGGAACCAGGGGGGAATTGGGGACCATATGACCCTTGGCTGGGAACATTGGGGGGA
AATTGAGAATCCTAAAAAACTATTGTGGAACGAAAGGGCAAAAAAAAAAATCAAACCAAAAGGTTTTTAAG
CTATTTTCGGGTACTGGGTAAAGGGGGGCTTGGGAAAGGGTTTTTCCAGTTCCAAAAGTTCCCGGGAGCC
ATTCCGTGGGAAAAATTTTTGCCCGGGGGGGGGCTTAAAAAGGGACGGGGATTTAAAAATGGCAAAAAAA
CCCGCCTACCCAACCCCAAAGGGAATTTTTGGGGGGAAAAAAAAAACCCCCCCTTCCCGGGGGTTAAATT
TTGCCCTTTTCACAGGGGGGGGAAAACCTCCCCCTCCCCCGGGATTCCCTGGGGGAGGAAAATTTTTTTC
TTTTTAAGAGAAGGGAGGATTTTTTTGGGAAGACAGCCCGGCGTTTTCTTTGTGGAAAAACTCTGCGTGT
GTTGTGGGGCTTCTTCTCTAAGAGAGCATCTCTCGAGACTCTGCGCCGCAGGATATGTGCTGTATCACGC
GAGTGTGTGATGATCAGCTTGCTGTGACGACGAATATCTGTATGTGACGACCGCCCACCTCTTGTGAGAG
AGCAATGATACGACGTCACATA

Kinase Domain Sequence:

>SC323401 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
AWKSSWRRWMWTCGTGTKMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGT
TTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCCCGGGATATCGTCGA
CCCACGCGTCCGCGGACGCGTGGGTGGCGGCAGCGGCTGTGGTGGCTGCGGCGGGTCCGGGCCCATGAGG
CGACGAAGGAGGCGGGACGGCTTTTACCCAGCCCCGGACTTCCGA

Restriction Sites:	Please inquire
ACCN:	NM_003161
Insert Size:	5100 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 custsupport@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. More info
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.
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:	NM_003161.2, NP_003152.1
RefSeq Size:	5332 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

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.