

Product datasheet for **RG232879**

S6K1 (RPS6KB1) (NM_001272060) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	S6K1 (RPS6KB1) (NM_001272060) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RPS6KB1
Synonyms:	p70 S6KA; p70(S6K)-alpha; p70-alpha; p70-S6K; PS6K; S6K; S6K-beta-1; S6K1; STK14A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG232879 representing NM_001272060
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGGAGTGTGGACATAGACCTGGACCAGCCAGAGGACCGGGCTCTGAGGATGAGCTGGAGGAGG
 GGGTTCAGTTAAATGAAAGCATGGACCATGGGGGAGTTGGACCATATGAACTTGGCATGGAACATTTGTGA
 GAAATTTGAAATCTCAGAACTAGTGTGAACAGAGGGCCAGAAAAATCAGACCAGAATGTTTTGAGCTA
 CTTCCGGTACTTGGTAAAGGGGGCTATGAAAAGGTTTTTCAAGTACGAAAAGTAACAGGAGCAAATACTG
 GAAAAATATTTGCCATGAAGGTGCTTAAAAAGGCAATGATAGTAAGAAATGCTAAAGATACAGCTCATA
 AAAAGCAGAACGGAATATTCTGGAGGAAGTAAAGCATCCCTTCATCGTGGATTTAATTTATGCCTTTCAG
 ACTGGTGGAAAACCTACCTCATCTTGGATATCTCAGTGGAGGAGAACTATTTATGCAGTTAGAAAGAG
 AGGGAATATTTATGGAAGACACTGCCTGCTTTTACTTGGCAGAAATCTCCATGGCTTTGGGGCATTTACA
 TCAAAAGGGGATCATCTACAGAGACCTGAAGCCGGAGAATATCATGCTTAAATACCAAGGTCATGTGAAA
 CTAACAGACTTTGGACTATGCAAAGAATCTATTATGATGGAACAGTCACACACACATTTTGGGAACAA
 TAGAATACATGGCCCCTGAAATCTTGATGAGAAGTGGCCACAATCGTGGCTGTGGATTGGTGGAGTTGGG
 AGCATTAAATGATGACATGCTGACTGGAGCACCCCATCACTGGGGAGAATAGAAAAGAAAAAATTGAC
 AAAATCCTCAAATGTAAGTCAATTTGCCTCCCTACCTCACACAAGAAGCCAGAGATCTGCTTAAAAAGC
 TGCTGAAAAGAAATGCTGCTTCTCGTCTGGGAGCTGGTCTGGGGACGCTGGAGAAGTTCAAGCTCATCC
 ATCTTTAGACACATTAAGTGGGAAGAACTTCTGGCTCGAAAGGTGGAGCCCCCTTTAAACCTCTGTTG
 CAATCTGAAGAGGATGTAAGTCAAGTTCGATTCCAAGTTTACACGTCAGACACCTGTCGACAGCCAGATG
 ACTCAACTCTCAGTGAAGTGCCTAATCAGTCTTCTGGGTTTTACATATGTGGCTCCACTGTACTTGA
 AAGTGTGAAAAGAAAAGTTTTCTTTGAACCAAAAATCCGATCACCTCGAAGATTTATTGGCAGCCACGA
 ACACCTGTGAGCCAGTCAAATTTCTCTGGGATTTCTGGGAAGAGGTGCTTCGCCAGCACAGCAA
 ATCCTCAGACACCTGTGGAATACCAATGGAAACAAGTGGCATAGAGCAGATGGATGTGACAATGAGTGG
 GGAAGCATCGGCACCACTTCCAATACGACAGCCGAACTCTGGCCATACAAAAACAAGCTTTTCCCATG
 ATCTCAAACGGCCAGAGCACCTGCGTATGAATCTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG232879 representing NM_001272060
 Red=Cloning site Green=Tags(s)

MAGVFDIDLDPEDAGSEDELEEGQLNESMDHGGVGPYELGMEHCEKFEISETSVNRGPEKIRPECFEL
 LRVLGKGGYGVKVFQVRKVTGANTGKIFAMKVLKKAMIVRNAKDTAHTKAERNILEEVKHPFIVDLIYAFQ
 TGGKLYLILEYLSGGELFMQLEREGIFMEDTACFYLAEISMLGHLHQKGIYRDLKPENIMLNHQGHVK
 LTDFGLCKESIHDGTVTHFTCGTIEYMAPEILMRSGHNRAVDWWSL GALMYDMLTGAPPFTGENRKKTID
 KILKCKLNLPPYLTQEARDLLKLLKRNAASRLGAGPGDAGEVQAHPFFRHINWEELLARKVEPPFKPLL
 QSEEDVSQFDSKFTRQTPVDSRDDSTLSEANQVFLGFTYVAPSVLESVKEKFSFEPKIRSPRRFIGSPR
 TPVSPVKFSPGDFWGRGASASTANPQTPVEYPMETSGIEQMDVTMSGEASAPLPIRQPNSGPYKKQAFPM
 ISKRPEHLRMNL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI
BamHI *KpnI*
RBS
Kozac
Consensus
SgfI
AscI

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII
NheI *RsrII*
MluI
NotI
XhoI
GFP Tag

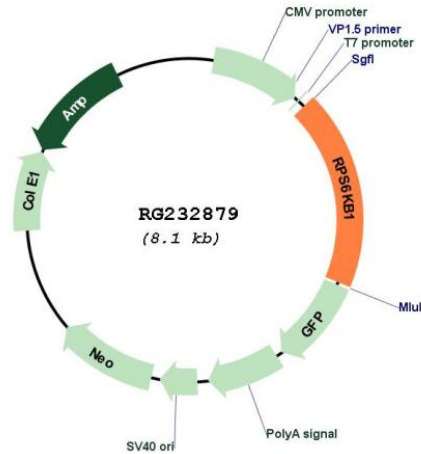
CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

T
R
T
R
P
L
E
M
E
S
D
-
-
-

PmeI
FseI

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

-
-
E
E
R
V
Stop

Plasmid Map:


ACCN: NM_001272060

ORF Size: 1506 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_001272060.1 , NP_001258989.1
RefSeq Size:	5368 bp
RefSeq ORF:	1509 bp
Locus ID:	6198
UniProt ID:	P23443
Cytogenetics:	17q23.1
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:	<p>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]</p>