

Product datasheet for **SC314588**

RPS6KA3 (NM_004586) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPS6KA3 (NM_004586) Human Untagged Clone
Tag:	Tag Free
Symbol:	RPS6KA3
Synonyms:	CLS; HU-3; ISPK-1; MAPKAPK1B; MRX19; p90-RSK2; pp90RSK2; RSK; RSK2; S6K-alpha3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_004586, the custom clone sequence may differ by one or more nucleotides

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ATGCCGCTGGCGCAGCTGGCGGACCCGTGGCAGAAGATGGCTGTGGAGAGCCCGTCCGACAGCGCTGAGA
ATGGACAGCAAATATGGATGAACCTATGGGAGAGGAGGAGATTAACCCACAACTGAAGAAGTCAGTAT
CAAAGAAATTGCAATCACACATCATGTAAGGAAGGACATGAAAAGGCAGATCCTCCCAGTTTGAACCT
TTAAAAGTATTAGGGCAGGGATCATTGGAAAGGTTTTCTTAGTTAAAAAATCTCAGGCTCTGATGCTA
GGCAGCTTTATGCCATGAAGGTATTGAAGAAGGCCACACTGAAAGTTCGAGACCGAGTTCGGACAAAAAT
GGAACGTGATATCTTGGTAGAGGTTAATCATCCTTTTATTGTCAAGTTGCATTATGCTTTTCAAAGTAA
GGGAAGTTGTATCTTATTTGGATTTTCTCAGGGGAGGAGATTTGTTTACACGCTTATCCAAAGAGGTGA
TGTTACACAGAAGAAGATGTCAAATCTACTTGGCTGAACCTGCACCTGCTTTAGACCATCTACATAGCCT
GGGAATAATTTATAGAGACTTAAAACAGAAAAATACTTCTTGATGAAGAAGGTCACATCAAGTTAACA
GATTTTCGGCTAAGTAAAGAGTCTATTGACCATGAAAAGAAGGCATATCTTTTTGTGGAAGTGTGGAGT
ATATGGCTCCAGAAGTAGTTAATCGTCGAGGTCATACTCAGAGTCTGACTGGTGGTCTTTTGGTGTGT
AATGTTTTGAAATGCTTACTGGTACACTCCCTTTCCAAGGAAAAGATCGAAAAGAAAACAATGACTATGAT
CTTAAAGCCAACTTGGAAATGCCACAGTTTTTGTAGTCTGAAGCGCAGAGTCTTTTACGAATGCTTTTCA
AGCGAAATCCTGCAAACAGATTAGGTGCAGGACCAGATGGAGTTGAAGAAATTAAGACATTCATTTTT
CTCAACGATAGACTGGAATAAAGTGTATAGAAGAGAAATTCATCCGCCATTTAAACCTGCAACGGGCAGG
CCTGAAGATACATTCTATTTTGTATCCTGAGTTTACTGCAAAAACCTCCCAAAGATTCACCTGGCATTCCAC
CTAGTGCTAATGCACATCAGCTTTTTCGGGGTTTGTGTTGCTATTACCTCAGATGATGAAAGCCA
AGCTATGCAGACAGTTGGTGTACATTCAATTGTTTCAGCAGTTACACAGGAACAGTATTCAGTTTACTGAT
GGATATGAAGTAAAAGAAGATATTGGAGTTGGCTCCTACTCTGTTTGAAGAGATGTATACATAAAGCTA
CAAACATGGAGTTTGCAGTGAAGATTATTGATAAAAGCAAGAGAGACCCAACAGAAGAAATGAAATCT
TCTTCGTTATGGACAGCATCAAACATTATCACTCTAAAGGATGTATATGATGATGGAAAGTATGTGAT
GTAGTAACAGAACTTATGAAAGGAGGTGAATTGCTGGATAAAAATCTTAGACAAAAATTTTCTCTGAAC
GAGAGGCCAGTGTCTGTTCACTATAACTAAAACCGTTGAATATCTTACGCACAAGGGGTGGTTCA
TAGAGACTTGAAACCTAGCAACATCTTTATGTGGATGAATCTGGTAATCCGGAATCTATTCGAATTTGT
GATTTTGGCTTTGCAAAACAGCTGAGAGCGGAAAATGGTCTTCTCATGACTCCTGTGTACTGCAAAT
TTGTTGCACCAGAGGTTTTAAAAGACAAGGCTATGATGCTGCTGTGATATATGGAGTCTTGGTGTCT
ACTCTATACAATGCTTACCGTTTCACTCCATTTGCAAATGGTCTGATGATACACCAGAGGAAATATTG
GCACGAATAGGTAGCGGAAAATCTCACTCAGTGGTGGTACTGGAATCTGTTTCAGACACAGCAAAGG
ACCTGGTGTCAAAGATGCTTCATGTAGACCCTCATCAGAGACTGACTGCTGCTCTGTGCTCAGACATCC
TTGGATCGTCCACTGGGACCACTGCCACAATACCAACTAAACAGACAGGATGCACCACATCTAGTAAAG
GGTGCCATGGCAGCTACATATTCTGCTTTGAACCGTAATCAGTACCAGTTTTTGAACCAGTAGGCCGCT
CTACTCTTGTCTCAGCGGAGAGGTATTAATAAATCACCTCAACAGCCCTGTGA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_004586 unedited</p> <p>TATAACCCCGCCGTTGGCGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAA GCAGAGCTCGTTTAGTGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGC GAATTCGGCACGAGGGAAGATGCCGCTGGCGCAGCTGGCGGACCCGTGGCAGAAGATGGC TGTGGAGAGCCCGTCCGACAGCGCTGAGAATGGACAGCAAATATGGATGAACCTATGGG AGAGGAGGAGATTAACCCACAACTGAAGAAGTCAGTATCAAAGAAATTGCAATCACACA TCATGTAAGGAAGGACATGAAAAGGCAGATCCTTCCCAGTTTGAACCTTTAAAAGTATT AGGGCAGGGATCATTGGAAAGGTTTTCTTAGTTAAAAAATCTCAGGCTCTGATGCTAG GCAGCTTTATGCCATGAAGGTATTGAAGAAGGCCACACTGAAAGTTCGAGACCGAGTTCCG GACAAAAATGGAACGTGATATCTTGGTAGAGTTAATCATCCTTTTATTGTCAAGTTGCA TTATGCTTTTCAAACGAAGGGAAGTTGTATCTTATTTTGGATTTTCTCAGGGGAGGAGA TTTGTTTACACGCTATCCAAGAGGTGATGTTACAGAAGAAGATGTGCAATTCTACTT GGCTGAACCTGCGCTTGGCTTAGACCATCTACATAGCCTGGGGAATAATTTATAGAGACT TAAACCCGAAAATATACTTTTTGAGAAGAAAGCCCATCAGGTTAACAGAATTCGG CCTAAGTAAAGAGTCTTTGACCTTGAAGAAGGGGTATTCTTTTGGGGAAGTGGGGA GTGTTTGGCTGCCGAAGATTAATCGTCCAGGCCTCTCTCAAAGCGGACGGGGGGCT TTGGGGGGTAAAGTTGGAAGGTGCCG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_004586 unedited</p> <p>NAATTTACTTTACCGCGCCGTTTCTATGATCGATTTTTCTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTAACTATTTAAACCAGTTTTAATAGTCAATTGATTAATAATAATAGATTCCA AGTTAAACAAGGCATGTATACATTAAGAAAGCAGTACAGAAATGACTGTATATGAACT GTTTACAAAAACATACAAAATGTTGGATGGTTTTTGGATACAGTGCTAATATAAACGGA TTGTTTAAAGCTAAGTGCTTAACATAAACTGTCCATCCCTATAACTAACAAAGAATATTTA AGGGACATGAAATATTTCTATAAAAAATAATGCTATATGGGGTACTTTATTCAAGTGATT TTTAGGGGATTCATATGTTTATTCTTCTCATTGATTACAGGGACTATATCTTCATC ATGTTTCCATTTTCTTCCGAAGCTCCAGGAAAATCTAACTTGCTAACAAATCATT AAAGCGAGAAGAGAGGAAAGCAGGAGCAGCAGCAGGAACAGCAGCATTATGGGTACCAGC TGGGACAGTGTGTGCTTGCAGGTGTCTCTCAAATACGTGCTACCTGTCCGACAGAACTGT GCTATCAGCTTACACCATGGTACCAAATATCTCACTGAGGTCACTTACAGGGCTGTTGA GGTGATTTTTTTAATACCTCTCCGCTGAGCAAGAGTAGAGCGCCCTACTGTTCCAAAAC TGGTGACTGATTACGGTTCAAAGCAGAATATGTAGCTGCCATGGCCCCCTTACTAGATG TGGTGCATCCTGTCTGTTTAGTTGGTATTGTGGCAATTTGTCCCAAGTGGACGATCCAG GATGTCTGAACACAAAGACAACAGTCAATCTCTGATGAGGTTTTAATGAAACATTTTTGA AACCCGGTC</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_004586
Insert Size:	2800 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<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_004586.2 , NP_004577.1
RefSeq Size:	7723 bp
RefSeq ORF:	2223 bp
Locus ID:	6197
UniProt ID:	P51812
Cytogenetics:	Xp22.12
Domains:	pkinase, S_TK_X, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Long-term potentiation, MAPK signaling pathway, mTOR signaling pathway, Neurotrophin signaling pathway, Oocyte meiosis, Progesterone-mediated oocyte maturation
Gene Summary:	This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains 2 non-identical kinase catalytic domains and phosphorylates various substrates, including members of the mitogen-activated kinase (MAPK) signalling pathway. The activity of this protein has been implicated in controlling cell growth and differentiation. Mutations in this gene have been associated with Coffin-Lowry syndrome (CLS). [provided by RefSeq, Jul 2008]