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Product datasheet for RC201835

RSK3 (RPS6KA2) (NM_021135) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RSK3 (RPS6KA2) (NM_021135) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RSK3
Synonyms:	HU-2; MAPKAPK1C; p90-RSK3; p90RSK2; pp90RSK3; RSK; RSK3; S6K-alpha; S6K-alpha2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC201835 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACCTGAGCATGAAGAAGTTCGCCGTGCGCAGGTTCTTCTCTGTGTACCTGCGCAGGAAGTCGCGCT
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CTGCGGGGAGGGGACCTCTTCACCCGGCTCTCCAAAGAGGTCATGTTCACGGAGGAGGATGTCAAGTTCT
ACCTGGCTGAGCTGGCCTTGGCTTTAGACCATCTCCACAGCCTGGGGATCATCTACAGAGATCTGAAGCC
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GACCACGACAAGAGAGCGTACTCCTTCTGCGGGACGATCGAGTACATGGCGCCCGAGGTGGTGAACCGGC
GAGGACACACGCAGAGTGCCGACTGGTGGTCCTTCGGCGTGCTCATGTTTGAGATGCTCACGGGGTCCCT
GCCGTTCCAGGGGAAGGACAGGAAGGAGACCATGGCTCTCATCCTCAAAGCCAAGCTGGGGATGCCGCAG
TTCCTCAGTGGGGAGGCACAGAGTTTGCTGCGAGCTCTCTTCAAACGGAACCCCTGCAACCGGCTGGGTG
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TCACCCAATCGTGCAGCAGTTACACGGGAACAACATCCACTTCACCGATGGCTACGAGATCAAGGAGGAC
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TATGCCCTTTCTGGGGGAAACTGGGACTCGATATCTGACGCAGCTAAAGACGTCGTGTCCAAGATGCTCC
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GCATGAAGAGACTCACGTCCACGCGGTTG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201835 protein sequence
Red=Cloning site Green=Tags(s)

MDLSMKKFAVRRFFSVYLRRKSRSKSSSLSRLEEEGVVKEIDISHHVKEGFEKADPSQFELLKVLGQGSY
GKVFLVRKVKGSDAGQLYAMKVLKKATLKVRDRVRSKMERDILAEVNHPFIVKLHYAFQTEGKLYLILDF
LRGGDLFTRLSKEVMFTEEDVKFYLAELALALDHLHSLGIIYRDLKPENILLDEEGHIKITDFGLSKEAI
DHDKRAYSFCGTIEYMAPEVVNRRGHTQSADWWSFGVLMFEMLTGSLPFQGKDRKETMALILKAKLGMPQ
FLSGEAQSLLRALFKRNPCNRLGAGIDGVEEIKRHPFFVTIDWNTLYRKEIKPPFKPAVGRPEDTFHFDP
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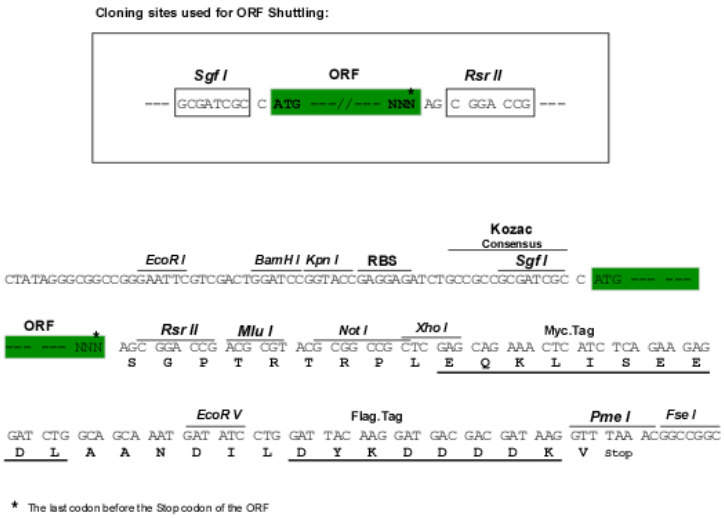
IGVGSYSVCKRCVHKATDTEYAVKIIDKSKRDPSEEIEILLRYGQHPNIITLKDVYDDGKFVYLVMELMR
GGELLDRILRQRYFSEREASDVLCTITKTMDYLHSQGVVHRDLKPSNILYRDESGSPESIRVCDFGFAKQ
LRAGNGLLMTPCYTANFVAPEVLKRQGYDAACDIWSLGILLYTMLAGFTPFANGPDDTPEEILARIGSGK
YALSGGNWDSISDAAKDVVSKMLHVDPHQRLTAMQVLKHPWVVNREYLSPNQLSRQDVHLVKGAMAATYF
ALNRTPQAPRLEPVLSSNLAQRRGMKRLTSTRL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6184_h09.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_021135

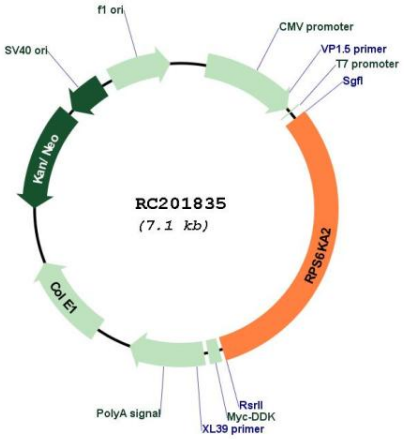
ORF Size: 2199 bp

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

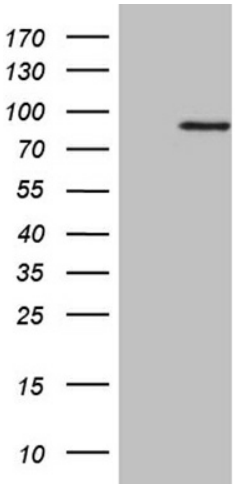
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_021135.3
RefSeq Size:	5817 bp
RefSeq ORF:	2202 bp
Locus ID:	6196
UniProt ID:	Q15349
Cytogenetics:	6q27
Domains:	pkinase, S_TK_X, TyrKc, PDZ, 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
MW:	83.2 kDa
Gene Summary:	This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains two 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. Alternative splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jan 2016]

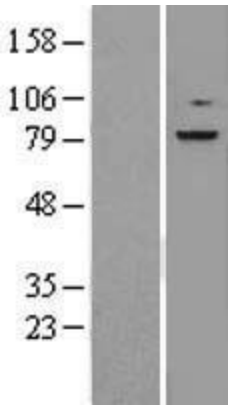
Product images:



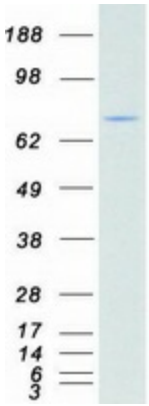
Circular map for RC201835



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RPS6KA2 (Cat# RC201835, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RPS6KA2 (Cat# [TA809950])(1:500). Positive lysates [LY402841] (100ug) and [LC402841] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402841]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201835 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RPS6KA2 protein (Cat# [TP301835]). The protein was produced from HEK293T cells transfected with RPS6KA2 cDNA clone (Cat# RC201835) using MegaTran 2.0 (Cat# [TT210002]).