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Product datasheet for RG213311

MSK2 / RSK-B (RPS6KA4) (NM_001006944) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MSK2 / RSK-B (RPS6KA4) (NM_001006944) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RPS6KA4
Synonyms:	MSK2; RSK-B; S6K-alpha-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG213311 representing NM_001006944
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGGACGAGGACGACGATGAGAGCTGCGCCGTGGAGCTGCGGATCACAGAAGCCAACCTGACCGGGC
ACGAGGAGAAGGTGAGCGTGGAGAACTTCGAGCTGCTCAAGGTGCTGGGCACGGGAGCCTACGGCAAGGT
GTTCCTGGTGCGGAAGGCGGGCGGGCACGACGCGGGGAAGCTGTACGCCATGAAGGTGCTGCGCAAGGCG
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ATGGCATTCAACCGGGGCAAGCGGGAGGGCTTCTTCCTGAAGAGCGTGGAGAATGCACCCCTGGCCAAGC
GGCGGAAGCAGAAGCTGCGGAGCGCCACCGCCTCCCGCCGGGGCTCCCCTGCACCAGCCAACCCGGGCCG
AGCCCCCGTCGCCTCCAAAGGGGCCCCCCGCCGAGCCAACGGCCCCCTGCCCCCCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

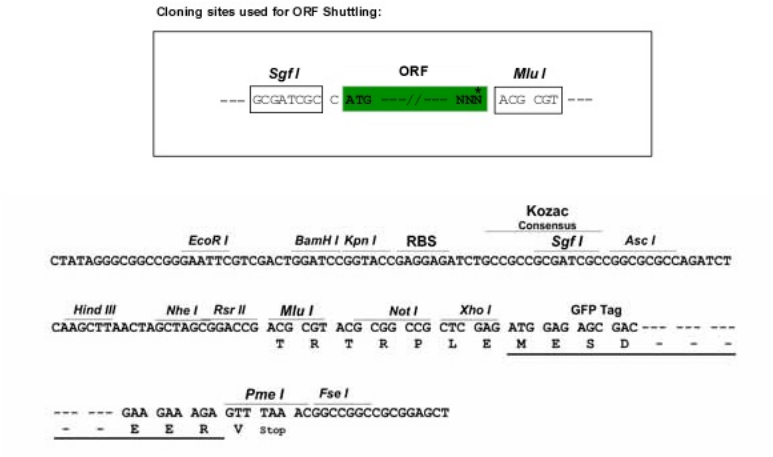
>RG213311 representing NM_001006944
Red=Cloning site Green=Tags(s)

MGDEDDDESCAVELRITEANLTGHEEKVSVENFELLKVLGTGAYGKVFLVRKAGGHDAGKLYAMKVLRKA
ALVQRAKTQEHTRTERSVLELVRQAPFLVTLHYAFQTDAKLHLILDYVSGGEMFTHLYQRQYFKEAEVRV
YGGEIVLALEHLHKLGIIYRDLKLENVLLDSEGHIVLTDFGLSKEFLTEEKERTFSFCGTIEYMAPEIIR
SKTGHGKAVDWWSLGILLFELLTGASPFTLEGERNTQAEVSRRILKCSPPFPPRIGPVAQDLLQRLLCKD
PKKRLGAGPQGAQEVRNHPFFQGLDWVALAARKIPAPFRPQIRSELDVGNFAEEFTRLEPVYSPPGSPPP
GDPRIFQGYSFVAPSILFDHNNAVMTDGLEAPGAGDRPGRAAVARSAMMQQYELDLREPALGQGSFSVCR
RCRQRQSGQEFAVKILSRRLEANTQREVAALRLCQSHPNVVNLHEVHHDQLHTYLVLELLRGGELLEHIR
KKRHFSESEASQILRSLVSAVSFMHEEAGVVHRDLKPENILYADDTPGAPVKIIDFGFARLRPQSPGVPM
QTPCFTLQYAAPELLAQQGYDESCDLWSLGVILYMMLSGQVPFQGASGQGGQSQAAEIMCKIREGRFSLD
GEAWQGVSEEAKELVRGLLTVDPAKRLKLEGLRGSSWLQDGSARSSPPLRTPDVLESSGPAVRSGLNATF
MAFNRGKREGFFLKSVENAPLAKRRKQKLRSATASRRGSPAPANPGRAPVASKGAPRRANGPLPPS

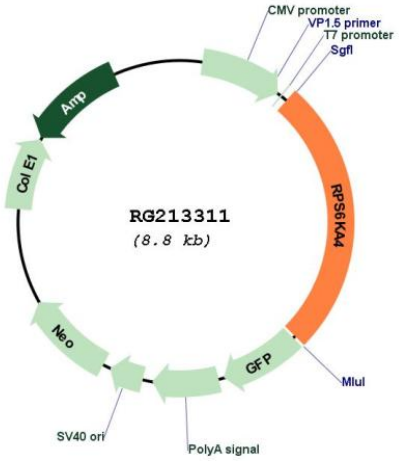
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001006944
ORF Size:	2298 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.
RefSeq:	NM_001006944.2
RefSeq Size:	3131 bp
RefSeq ORF:	2301 bp
Locus ID:	8986

UniProt ID:	O75676
Cytogenetics:	11q13.1
Protein Families:	Druggable Genome, Protein Kinase, Transcription Factors
Protein Pathways:	MAPK signaling pathway, Neurotrophin signaling pathway
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 CREB1 and ATF1. The encoded protein can also phosphorylate histone H3 to regulate certain inflammatory genes. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2016]