

Product datasheet for SC116000

RRAGA (NM_006570) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RRAGA (NM_006570) Human Untagged Clone
Tag:	Tag Free
Symbol:	RRAGA
Synonyms:	FIP-1; FIP1; RAGA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC116000 sequence for NM_006570 edited (data generated by NextGen Sequencing)

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ATGCCAAATACAGCCATGAAGAAAAAGGTGCTGCTGATGGGGAAGAGCGGGTCGGGGAAG
ACCAGCATGAGGTCGATAATCTTCGCCAATTACATTGCTCGCGACACCCGGCGCCTGGGG
GCCACCATTGACGTGGAACACTCCACGTCGGATTCTAGGGAACCTGGTGTGAACCTG
TGGGACTGTGGCGGTCAGGACACCTTCATGAAAATTACTTCACCAGCCAGCGAGACAAT
ATCTTCCGTAACGTGGAAGTTTTGATTTACGTGTTTGACGTGGAGAGCCGCGAACTGAA
AAGGACATGCATTATTACCAGTCGTGTCTGGAGGCCATCTCCAGAACTCTCCTGACGCC
AAAATCTTCTGCCTGGTGCACAAAATGGATCTGGTTCAGGAGGATCAGCGTGACCTGATT
TTTAAAGAGCGAGAGGAAGACCTGAGGCGTCTGTCTCGCCCGCTGGAGTGTGCTTGT
CGAACGTCCATCTGGGATGAGACGCTCTACAAAGCCTGGTCCAGCATCGTCTACCAGCTG
ATTCCCAACGTTTCAGCAGCTGGAGATGAACCTCAGGAATTTGCCCAAATCATTGAGGCC
GATGAAGTTCTGCTGTTGAAAAGAGCTACATTCTGGTTATTTCCCACTACCAGTGCAAA
GAGCAGCGCGACGTCCACCGGTTTGAGAAGATCAGCAACATCATCAAACAGTTCAAGCTG
AGCTGCAGTAAATGGCCGCTTCCCTCCAGAGCATGGAAGTTAGGAATTCCAACTTCGCT
GCTTTCATCGACATCTTCACCTCAAATACGTACGTGATGGTGGTCATGTCAGATCCGTCG
ATCCCTTCTGCGGCCACTCTGATCAACATTCGCAATGCCCGGAAACACTTTGAGAAGCTG
GAGAGAGTGGATGGCCCCAAGCACAGTCTCCTTATGCGTTGA

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Clone variation with respect to NM_006570.4



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006570 unedited
 GACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGTGCCCGGGGTGATGCCAAAT
 ACAGCCATGAAGAAAAGGTGCTGCTGATGGGGAAGAGCGGGTCGGGAAGACCAGCATGA
 GGTCGATAATCTTCGCCAATTACATTGCTCGGCACACCCGGCGCCTGGGGGCCACCATTG
 ACGTGGAACACTCCCACGTCCGATTCTAGGGAACCTGGTGTGAACCTGTGGGACTGTG
 GCGGTCAGGACACCTTCATGAAAAATTACTTCACCAGCCAGCGAGACAATATCTTCCGTA
 ACGTGGAAGTTTTGATTTACGTGTTTGACGTGGAGAGCCGGAAGTGGAAAAGGACATGC
 ATTATTACCAGTCGTGTCTGGAGGCCATCTCCAGAACTCTCCTGACGCCAAAATCTTCT
 GCCTGGTGACAAAAATGGATCTGGTTCAGGAGGATCAGCGTGACCTGATTTTTAAAGAGC
 GAGAGGAAGACCTGAGGCGTCTGTCTCGCCCGCTGGAGTGTGCTTGTTCGAACGTCCA
 TCTGGGATGAGACGCTCTACAAGCCTGGTCCAGCATCGTCTACCAGCTGATTCCAAACGT
 TCAGCAGCTGGAGATGAACCTCANGAATTTTTGCCCAAATCATTGAGGCCGATGAAAGTC
 TGCTGNTCGAAAGAGCTACATTCTGGTTATTTCCCACTACCAGTGAAGAGCAGCGCGA
 CGTCCACCGGTTGAGAAGATCAGCACTCATCAAACGTTCAAGCTGAGCTGCAGTAATGGC
 CCGGTTTTCTCCAGACATGGGAGTTAGGAATTCAACTCGCTGCTTCATCGACATCTCAC
 TNAATACTCGGGATGGGGGCATGTAATCCGGNGATCCTTTTGGGGGCCTTTGATCAC
 ATTGCAATGCCGGAACCTTTTAGAGCTGAAAAAGGGATGGCCACCCAAGTTCCTTAGGG
 TGAATGGCCAAGCTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006570 unedited
 GCAACCTTCCAGGGCCAGAAGAAGCACTGGGGAGGGTACAGGGATGCCACCCGGGATC
 TGTTCCAGGAAACAGCTATGACCCGCGCCCAATCTAGAGTCGAGNTTTTTTTTTTTTTT
 TTT
 CATGAAGGAACCCAAAAAATTTATAAAGGCATTTTAATACCTTGGGGAAAAA
 ACATTCGTTTTTGAATCTGATCCGGAATACAGGAAAATCCTGGGAAAGGCTTTGAGGG
 GCATATTTATCATAACCGGGGAAGGAAAACCCCGACCCCTACTTTAGGGTACCC
 CATACCACTTTTAAAAAAGGGCAGCTTCAAGCTCTACTGGGTAGCTGAAAAATAGCGN
 NNAATGTTTAAAAAAGGGGAAAGCGGGAAAAAATGAAAGGGTAAAGCCGCCACCCCTT
 CAAAGCCCACTTTAAGCCCGGACTTTTTGAATATTAATAAAGGGGGCAACAAAA
 AAGGCAATTCAGCATTTTCAAAAAGAGCATTTGGCAATATTCAACCCATAAGGAACTGG
 GCTTGGGGCCATCCACTCTCTCAGCTTTCAAAGGGTTCCGGGCATTGCGAATGTTTAT
 CANAGGGGCCGCAAAAGGGATCGACGGATCTGACATGACCACCATCCCGTACGTATTTGA
 GGTGAAGATGTCGATTGGGNNATGAAGGGGAATTCCTAACTTCCATGCTTGGAGGGAAC
 GGCCAATTACCTGGACCCACCTGGAACGGTTGGAAGAAGGGGCGGATCTTTCAAACGGGG
 GGACCTCGGCTGCTTTTGCCTGGAGGGGAGAAAACCAAAGAGGGCTTTTCCAACAGAAA
 ACTTCTTGGCTTAGGATTGGGCAATCCGGAGGT

Restriction Sites:

NotI-NotI

ACCN:

NM_006570

Insert Size:

1500 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
Components:	<p>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).</p>
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_006570.4 , NP_006561.1
RefSeq Size:	1657 bp
RefSeq ORF:	942 bp
Locus ID:	10670
UniProt ID:	Q7L523
Cytogenetics:	9p22.1
Domains:	Gtr1_RagA
Gene Summary:	<p>Guanine nucleotide-binding protein that plays a crucial role in the cellular response to amino acid availability through regulation of the mTORC1 signaling cascade. Forms heterodimeric Rag complexes with RRAGC or RRAGD and cycles between an inactive GDP-bound and an active GTP-bound form. In its active form participates in the relocalization of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB. Involved in the RCC1/Ran-GTPase pathway. May play a direct role in a TNF-alpha signaling pathway leading to induction of cell death. May alternatively act as a cellular target for adenovirus E3-14.7K, an inhibitor of TNF-alpha functions, thereby affecting cell death.[UniProtKB/Swiss-Prot Function]</p>