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Product datasheet for RC212459

GCN2 (EIF2AK4) (NM_001013703) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCN2 (EIF2AK4) (NM_001013703) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GCN2
Synonyms:	GCN2; PVOD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC212459 representing NM_001013703
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC212459 representing NM_001013703
Red=Cloning site Green=Tags(s)

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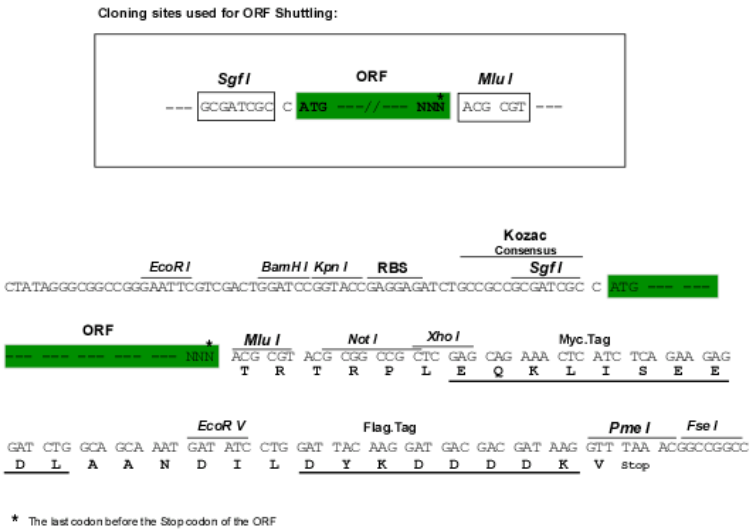
Chromatograms: https://cdn.origene.com/chromatograms/mk8119_c12.zip

Restriction Sites: SgfI-MluI

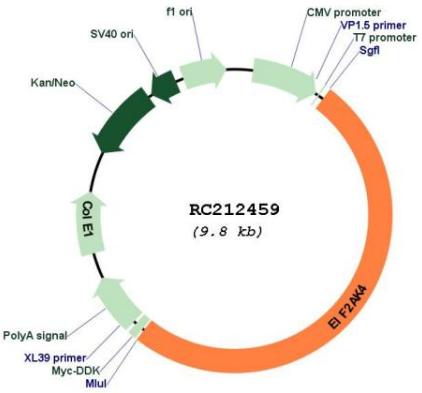
Cloning Scheme:



ACCN:	NM_001013703
ORF Size:	4947 bp
OTI Disclaimer:	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. 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_001013703.2, NP_001013725.2
RefSeq Size:	5532 bp
RefSeq ORF:	4950 bp
Locus ID:	440275
UniProt ID:	Q9P2K8
Cytogenetics:	15q15.1
Protein Families:	Druggable Genome, Protein Kinase
MW:	187.4 kDa

Gene Summary: This gene encodes a member of a family of kinases that phosphorylate the alpha subunit of eukaryotic translation initiation factor-2 (EIF2), resulting in the downregulaton of protein synthesis. The encoded protein responds to amino acid deprivation by binding uncharged transfer RNAs. It may also be activated by glucose deprivation and viral infection. Mutations in this gene have been found in individuals suffering from autosomal recessive pulmonary venoocclusive-disease-2. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RC212459