

## Product datasheet for **RR209576**

### Eif4g2 (NM\_001017374) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eif4g2 (NM_001017374) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif4g2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR209576 representing NM\_001017374  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

GTGGAGAGTGCATTGCAGAAGGGGTGCTTCTCGTTTCAGTGCTTCTTCGGGCGGAGGAGGAAGTAGGG  
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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR209576 representing NM\_001017374  
 Red=Cloning site Green=Tags(s)

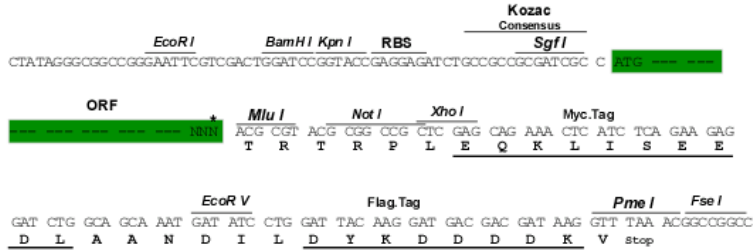
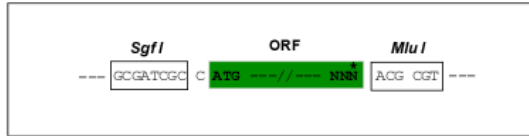
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 LEVDIPLVKSILAQFAARAIISELVSISELAQPLESGTHFPLFLLCLQLAKLQDREWLTQLFQQSKVNM  
 QKMLPEIDQNKDRMLEILEGKGLSFLFLLKLEKELLKQIKLDPSPQTIYKWKDNI SPKLHVDKGFVNI  
 LMTSFLQYISSEVSPPSDETDSSAPSKEQLEQEKQLLSFKPVMQKFLHDHVDLQVSALYALQVHCYNS  
 SFPKGMLLRFFVHFYDMEIEEEAFLAWKEDITQEFPGKGKALFQVNWLTWLETAESEEESEEEAD

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**Restriction Sites:** Sgfl-MluI

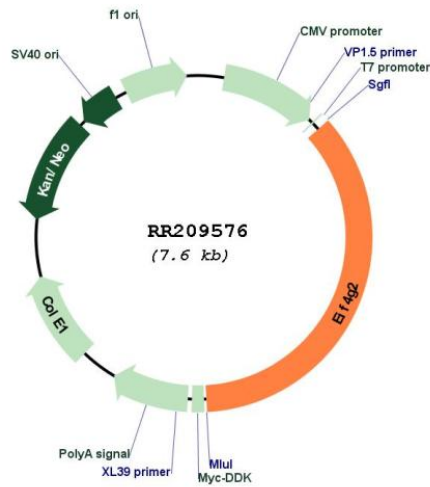
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001017374
<b>ORF Size:</b>	2718 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001017374.2</a> , <a href="#">NP_001017374.2</a>
<b>RefSeq Size:</b>	5008 bp
<b>RefSeq ORF:</b>	2721 bp
<b>Locus ID:</b>	361628
<b>Cytogenetics:</b>	1q33
<b>MW:</b>	102.1 kDa
<b>Gene Summary:</b>	Translation initiation is mediated by specific recognition of the cap structure by eukaryotic translation initiation factor 4F (eIF4F), which is a cap binding protein complex that consists of three subunits: eIF4A, eIF4E and eIF4G. The protein encoded by this gene shares similarity with the C-terminal region of eIF4G that contains the binding sites for eIF4A and eIF3; eIF4G, in addition, contains a binding site for eIF4E at the N-terminus. Unlike eIF4G, which supports cap-dependent and independent translation, this gene product functions as a general repressor of translation by forming translationally inactive complexes. In vitro and in vivo studies in human indicate that translation of this mRNA initiates exclusively at a non-AUG (GUG) codon. This also appears to be true for mouse and rat. [provided by RefSeq, Jul 2008]