

## Product datasheet for **MC222254**

### Eif4g2 (NM\_001040131) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eif4g2 (NM_001040131) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Eif4g2
Synonyms:	DAP; DAP-5; E130105L11Rik; Na; Nat; Nat1; Natm1; p97
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >MC222254 representing NM\_001040131  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

GTGGAGAGTGCATTGCAGAAGGGGTGCTTCTCGTTTCAGTGCTTCTTCGGGCGGAGGAGGAAGTAGGG  
 GTGCACCTCAGCACTATCCCAAGACTGCTGGCAACAGCGAGTTCCCTGGGAAAACCCAGGGCAAAACGC  
 TCAGAAATGGATTCTGCACGAAGCACTAGACGAGATGACAACCTCCGCAGCAAACAACCTCCGCAAATGAA  
 AAAGAACGACATGATGCAATCTTCAGGAAAGTAAGAGGCATACTAAATAAGCTTACTCTGAAAAGTTTG  
 ACAAGCTATGCCTTGAGCTCCTCAATGTGGGTGTAGAGTCTAACTCATCCTTAAAGGGGTCACTACTGCT  
 GATTGTGGACAAAGCCTTAGAAGAGCCAAAGTATAGCTCGCTGTATGCTCAGCTATGCTGCGATTGGCA  
 GAAGATGCACCAAACCTTGTAGGGCCAGCAGAGGGTCAACCAGGACAGAAGCAAAGCACAACATTCA  
 GACGCCTCTTGATTTCAAATTTGCAAGATGAATTTGAAAACCGAACAGAAATGTTGATGTCTATGATAA  
 GCGTGAAAATCCCCTCCTCCTGAGGAGGAGAACAGAGAGCCATTGCTAAGATCAAGATGTTGGGGAAC  
 ATCAAATTCATTGGAGAACTTGGCAAGCTTGATCTTATTCATGAATCTATCCTTCATAAGTGCATCAAAA  
 CACTTTTGGAAAAGAAGAAGAGAGTCCAACCAAGATATGGGAGAGGATTTGGAGTGCCTCTGTAGAT  
 AATGAGGACAGTGGGACCTCGATTAGACCATGAACGAGCCAAGTCTTAATGGATCAGTACTTTGCCAGA  
 ATGTGTTCCCTTAATGTTAAGTAAGGAATTGCCAGCCAGGATTCGTTTCTACTGCAGGATACTGTAGAGT  
 TGCGAGAGCACCATTGGGTTCCCTCGAAGGCTTTTCTTGACAATGGACCAAGACGATCAATCAAATCCG  
 TCAAGATGCAGTAAAAGATCTAGGAGTGTATTCCTGCTCCTATGGCTCAAGGGAGGAATGACTTCTTC  
 TGGAGGGACCGTTTCATGCCCGCAAGGATGAAAATGGATAGGGACCCACTTGGGGGACTTGCTGATATGT  
 TTGGACAAATGCCAGGTAGTGAATTGGTACTGGTCCAGGAGTTATCCAGGATAGATTTTCAACCCACAAT  
 GGGACGTATCGTTCAAATCAGCTCTTCAATGGCCATGGGGGGCACATCATGCCTCCACGCAATCGCAG  
 TTTGGAGAGATGGGGGCAAGTTTATGAAAAGCCAGATTAGTTTGGAGCCTGCTCAGTCTTTCTAATGA  
 ATAAAAATCAGGTGCCAAAGCTTCAGCCCCAGATAACTATGATTCCTCCAGTGCACAGCCACCACGCAC  
 TCAAACACCGCTCTGGGACAGACACCTCAACTGGTCTCAAACCAATCCACCCTTATCCAGGAAAAG  
 CCTGCCAAGACTAGCAAAAAGCCACCACCATCAAAGGAAGAACTACTTAACTGACCGAAGCCGTTGTGA  
 CTGACTATCTGAACAGTGGAAATGCCAACGACGCTGTGAGTGGTGTGAGAGAAATGAGAGCTCCAAAACA  
 CTTTCTCCTGAGATGCTAAGCAAAGTATCATCTGTCACTTGTAGAGAAGTATGAAGATAAAGAAAAA  
 GCAAGCTCTTTAATCAGTTTACTCAAACAGGAAGGGATAGCCACAAGTGACAACCTCATGCAGGCTTTCC  
 TGAATGTATTGGAGCAGTGCCCAAACTGGAGGTTGACATCCCCTTGGTGAATCTTACTTGGCACAGTT  
 TGCAGCTCGTGCTATAATTTAGAGTGGTGGAGCATTCCGAACTAGCTCAACCCTGGAGAGTGGCACC  
 CACTTCCCTCTCTTCTTACTTTGTCTTCAACAATTAGTAAATGCAAGACCGAGAGTGGTTAACCGAAC  
 TTTTTCACAAAGCAAGGTCAATATGCAGAAAAATGCTGCCAGAAATGATCAGAAATAGGATCGAATGTT  
 GGAGATTTTGGAAAGGAAAGGACTGAGTTTCTTATCCCACTCCTTAAATGGAGAAGGAACTATTGAAG  
 CAAATTAAGCTGGATCCATCCCCTCAAACATATATAAATGGATTAAGATAACATCTCTCCAAACTTC  
 ATGTAGATAAAGGATTCGTGAACATCTAATGACCAGCTTCTTACAGTACATTTCTAGTGAAGTAAGCCC  
 ACCCAGCGATGAAACAGATTTCTCCTCTGCTCCTTCCAAAGAGCAGTTAGAGCAGGAAAAACAGCTGCTG  
 CTCTCTTTTAAGCCAGTGATGCAGAAATTTCTTATGATCATGTGGATCTACAGGTCAGTGCCCTGTATG  
 CTTTGCAGGTGCACTGTTACAACAGCAGCTTCCAAAAGGCATGTTACTTCGATTTTTTTGTTCACTTCTA  
 TGACATGGAAATATTGAAGAGGAAGCTTTCTTAGCTTGGAAAGGACATAACTCAAGAGTTTCCAGGA  
 AAAGGCAAGGCTTTGTTCCAGGTGAATCAGTGGCTAACCTGGCTAGAAACTGCTGAAGAAGAAGAATCAG  
 AGGAAGAAGCTGACT**AA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001040131  
**Insert Size:** 2607 bp

<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>	<u><a href="#">NM_001040131.2</a></u> , <u><a href="#">NP_001035221.1</a></u>
<b>RefSeq Size:</b>	7646 bp
<b>RefSeq ORF:</b>	2607 bp
<b>Locus ID:</b>	13690
<b>UniProt ID:</b>	<u><a href="#">Q62448</a></u>
<b>Cytogenetics:</b>	7 58.0 cM
<b>Gene Summary:</b>	<p>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. Transgene expression of the apolipoprotein B mRNA-editing enzyme (APOBEC-1) causes extensive editing of this mRNA, which could contribute to the potent oncogenesis induced by overexpression of APOBEC-1. 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. Two alternatively spliced transcript variants that encode different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame segment, compared to variant 1, resulting in a shorter protein (isoform 2), compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no quality transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.</p>