

## Product datasheet for **RG226043**

### EIF2AK1 (NM\_001134335) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EIF2AK1 (NM_001134335) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EIF2AK1
Synonyms:	HCR; hHRI; HRI; LEMSPAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG226043 representing NM\_001134335  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACGGGGGCAACTCCGGGGTCCGCAAGCGCGAAGAGGAGGGCGACGGGGCTGGGCTGTGGCTGCGC  
 CGCCGGCCATCGACTTTCCCGCCGAGGGCCCGACCCGAATATGACGAATCTGATGTTCCAGCAGAAAT  
 CCAGGTGTTAAAAGAACCCTACAAACAGCCAACCTTCCCTTTTGCAGTTGCAAACCAACTCTTGCTGGTT  
 TCTTTGCTGGAGCACTTGAGCCACGTGCATGAACCAAACCCACTTCGTTCAAGACAGGTGTTAAGCTAC  
 TTTGCCAGACGTTTATCAAAATGGGGCTGCTGTCTTCTTCACTTGTAGTGACGAGTTTAGCTCATTGAG  
 ACTACATCACAACAGAGCTATTACTCACTTAATGAGGTCTGCTAAAGAGAGAGTTCGTCAGGATCCTTGT  
 GAGGATATTTCTCGATCCAGAAAATCAGATCAAGGGAAGTAGCCTTGGAAACACAAACTCACGTTACT  
 TAAATGAATTTGAAGAACTTGCCATCTTAGGAAAAGTGGATACGGAAGAGTATACAAGGTCAGGAATAA  
 ATTAGATGGTCAGTATTATGCAATAAAAAAATCCTGATTAAGGGTGCAACTAAAACAGTTTGCATGAAG  
 GTCTACGGGAAGTGAAGGTGCTGGCAGGTCTTACGACCCCAATATTGTTGGCTATCACACCGCGTGGA  
 TAGAACATGTTTATGTGATTAGCCACGAGACAGAGCTGCCATTGAGTTGCCATCTCTGGAAGTGCTCTC  
 CGACCAGGAAGAGGACAGAGAGCAATGTGGTGTTAAAAATGATGAAAGTAGCAGCTCATCCATTATCTTT  
 GCTGAGCCACCCAGAAAAAGAAAAACGCTTTGGAGAATCTGACACTGAAAATCAGAATAACAAGTCGG  
 TGAAGTACACCACCAATTTAGTCATAAGAGAATCTGGTGAAGTGGAGTTCGACCCCTGGAGCTCCAGGAAA  
 TGGCTTGGCTGGTTTGTCTGCCAGTTCATTTGTGGAACAGCAGCTGCCACTCAGGCGTAATCCCACCTA  
 GAGGAGAGTTTCACATCCACCGAAGAATCTTCCGAAGAAAATGCAACTTTTGGGTGAGCAGAGGCAC  
 AGTACCCTGATGCTGCACATCCAGATGCAGCTGTGTGAGCTCTCGCTGTGGGATTGGATAGTCGAGAG  
 AAACAAGCGGGGGCCGGGAGTATGTGGACGAGCTGCCTGTCTTATGTTATGGCCAATGTTGCAACAAAA  
 ATTTTTCAAGAATTGGTAGAAGGTGTGTTTTACATACATAACATGGGAATTGTGCACCGAGATCTGAAGC  
 CAAGAAATATTTTTCTTCATGGCCCTGATCAGCAAGTAAAAATAGGAGACTTTGGTCTGGCCTGCACAGA  
 CATCTACAGAAGAACACAGACTGGACCAACAGAAACGGGAAGAGAACACCAACACATACGTCAGAGTG  
 GGTACTTGTCTGTACGCTTACCCGAACAGTTGGAAGGATCTGAGTATGATGCCAAGTCAGATATGTACA  
 GCTTGGGTGTGGTCTGCTAGAGCTCTTTCAGCCGTTTGGAAACAGAAATGGAGCGAGCAGAAGTTCTAAC  
 AGGTTTAAAGAACTGGTCAGTTGCCGGAATCCCTCCGTAAGGTTGTCAGTGAAGCAAGTATATCCAG  
 CACTTAAACGAGAAGAACTCATCGCAGAGACCATCTGCCATTGAGCTGCTGCAGAGTGAAGTTTCCAAA  
 ATTCTGGAAATGTTAACCTCACCTACAGATGAAGATAATAGAGCAAGAAAAAGAAATTGCAGAACTAAA  
 GAAGCAGCTAAACCTCTTTCTCAAGACAAAGGGGTGAGGGATGACGGAAGGATGGGGCGTGGGA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG226043 representing NM\_001134335  
 Red=Cloning site Green=Tags(s)

MQGGNSGVRKREEEGDGAGAVAAPPAIDFPAEGPDPEYDESDVPAEIQVLKEPLQQPTFFAVANQLLLV  
 SLLEHLSHVHEPNPLRSRQVFKLLCQTFIKMGLSSFTCSDEFSSLRLHNNRAITHLMRSAKERVRQDPC  
 EDISRIQKIRSREVALEAQTSTRYLNEFEELAILKGGYGRVYKVRNKLDGQYYAIKKILIKGATKTVCMK  
 VLREVKVLAGLQHPNIVGYHTAWIEHVHVIQPRDRAAIELPSLEVLSDQEEDREQCQVKNDESSSSSIIF  
 AEPTPEKEKRFGE SDTENQNNKSVKYTTNLVIRESGELESTLELQENGLAGLSASSIVEQQLPLRRNSHL  
 EESFTSTEESSSEENVNFLGQTEAQYHMLHIQMQLCELSLWDWIVERNKRGREYVDESACPYVMANVATK  
 IFQELVEGVFYIHNMGIVHRDLKPRNIFLHGPDQVQKIGDFGLACTDILQKNTDWTNRNGKRTPTHTSRV  
 GTCLYASPEQLEGSEYDAKSDMYSLGVVLELFLQPFQTEMERAEVLTGLRTGQLPESLRKRPVQAKYIQ  
 HLTRRNSSQRPSAIQLLQSELFQNSGNVNLTLQMKIIEQEKEIAELKKQLNLLSQDKGVRDDGKGGVG

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<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>
<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>	<p><a href="#">NM_001134335.1</a>, <a href="#">NP_001127807.1</a></p>
<b>RefSeq Size:</b>	<p>4462 bp</p>
<b>RefSeq ORF:</b>	<p>1890 bp</p>
<b>Locus ID:</b>	<p>27102</p>
<b>UniProt ID:</b>	<p><a href="#">Q9BQI3</a></p>
<b>Cytogenetics:</b>	<p>7p22.1</p>
<b>Protein Families:</b>	<p>Druggable Genome, Protein Kinase</p>
<b>Gene Summary:</b>	<p>The protein encoded by this gene acts at the level of translation initiation to downregulate protein synthesis in response to stress. The encoded protein is a kinase that can be inactivated by hemin. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2008]</p>