

Product datasheet for **RC226043**

EIF2AK1 (NM_001134335) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | EIF2AK1 (NM_001134335) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | EIF2AK1 |
| Synonyms: | HCR; hHRI; HRI; LEMSPAD |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>RC226043 representing NM_001134335
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAGGGGGCAACTCCGGGGTCCGCAAGCGCAAGAGGAGGGCGACGGGGCTGGGCTGTGGCTGCGC
 CGCCGGCCATCGACTTTCCCGCCGAGGGCCCGACCCGAATATGACGAATCTGATGTTCCAGCAGAAAT
 CCAGGTGTTAAAAGAACCCTACAAACAGCCAACCTTCCCTTTTGCAGTTGCAAACCAACTCTTGCTGGTT
 TCTTTGCTGGAGCACTTGAGCCACGTGCATGAACCAAACCACTTCGTTCAAGACAGGTGTTAAGCTAC
 TTTGCCAGACGTTTATCAAAATGGGGCTGCTGTCTTCTTCACTTGTAGTGACGAGTTTAGCTCATTGAG
 ACTACATCACAACAGAGCTATTACTCACTTAATGAGGTCTGCTAAAGAGAGAGTTCGTCAGGATCCTTGT
 GAGGATATTTCTGATCCAGAAAATCAGATCAAGGGAAGTAGCCTTGGAAACACAACTTCACGTTACT
 TAAATGAATTTGAAGAACTTGCCATCTTAGGAAAAGTGGATACGGAAGAGTATACAAGGTCAGGAATAA
 ATTAGATGGTCAGTATTATGCAATAAAAAAATCCTGATTAAGGGTGCACTAAAACAGTTTGCATGAAG
 GTCTACGGGAAGTGAAGGTGCTGGCAGGTCTCAGCACCCCAATATTGTTGGCTATCACACCGCGTGGGA
 TAGAACATGTTTATGTGATTAGCCACGAGACAGAGCTGCCATTGAGTTGCCATCTCTGGAAGTGCTCTC
 CGACCAGGAAGAGGACAGAGAGCAATGTGGTGTTAAAAATGATGAAAGTAGCAGCTCATCCATTATCTTT
 GCTGAGCCACCCAGAAAAAGAAAAACGCTTTGGAGAATCTGACACTGAAAATCAGAATAACAAGTCGG
 TGAAGTACACCACCAATTTAGTCATAAGAGAATCTGGTGAACCTTGGTGCAGCCCTGGAGCTCCAGGAAA
 TGGCTTGGCTGGTTTGTCTGCCAGTTCATTTGTGGAACAGCAGCTGCCACTCAGGCGTAATCCCACCTA
 GAGGAGAGTTTCATCCACCGAAGAATCTTCCGAAGAAAATGTCACTTTTTGGGTGAGACAGAGGCAC
 AGTACCACCTGATGCTGCACATCCAGATGCAGCTGTGTGAGCTCTCGCTGTGGGATGGATAGTCGAGAG
 AAACAAGCGGGGGCCGGGAGTATGTGGACGAGTCTGCCTGTCTTATGTTATGGCCAATGTTGCAACAAAA
 ATTTTTCAAGAATTGGTAGAAGGTGTGTTTTACATACATAACATGGGAATTGTGCACCGAGATCTGAAGC
 CAAGAAATATTTTTCTTCATGGCCCTGATCAGCAAGTAAAAATAGGAGACTTTGGTCTGGCCTGCACAGA
 CATCTACAGAAGAACACAGACTGGACCAACAGAAACGGGAAGAGAACACCAACACATACGTCAGAGTG
 GGTACTTGTCTGTACGCTTACCCGAACAGTTGGAAGGATCTGAGTATGATGCCAAGTCAGATATGTACA
 GCTTGGGTGTGGTCTGTAGAGCTCTTTCAGCCGTTTGGAAACAGAAATGGAGCGAGCAGAAGTTCTAAC
 AGGTTTAAAGAACTGGTCAGTTGCCGGAATCCCTCCGTAAGGTTGTCAGTGAAGCAAGTATATCCAG
 CACTTAACGAGAAGAACTCATCGCAGAGACCATCTGCCATTGAGCTGCTGCAGAGTGAAGTTTCCAAA
 ATTCTGGAAATGTTAACCTCACCTACAGATGAAGATAATAGAGCAAGAAAAAGAAATTGCAGAAGTAAA
 GAAGCAGCTAAACCTCCTTTCTCAAGACAAAGGGGTGAGGGATGACGGAAGGATGGGGCGTGGGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226043 representing NM_001134335
 Red=Cloning site Green=Tags(s)

MQGGNSGVRKREEEGDGAGAVAAPPAIDFPAEGPDPEYDESDVPAEIQVLKEPLQPTFPFVANQLLL
 SLLLEHLSHVHEPNPLRSRQVFKLLCQTFIKMGLLSSFTCSDEFSSLRLHHNRAITHLMRSKERVQRDPC
 EDISRIQKIRSREVALEAQTSTRYLNFEELAILKGGYGRVYKVRNKLDGQYYAIKKILIKGATKTVCMK
 VLREVKVLAGLQHPNIVGYHTAWIEHVHVIQPRDRAAIELPSLEVLSDQEEDREQCQGVKNDESSSSSIIF
 AEPTPEKEKRFGESDTENQNNKSVKYTTNLVIRESGELESTLELQENGLAGLSASSIVEQQLPLRRNSHL
 EESFTSTEESSSEENVNFLGQTEAQYHMLHIQMLCELSLWDWIVERNKRGREYVDESACPYVMANVATK
 IFQELVEGVFYIHNMGIVHRDLKPRNIFLHGPDQVKIGDFGLACTDILQKNTDWTNRNGKRTPTHTSRV
 GTCLYASPEQLEGSEYDAKSDMYSLGVVLELFPFGTEMERAELVTGLRTGQLPESLRKRCPVQAKYIQ
 HLTRRNSSQRPSAIQLLQSELFQNSGNVNLTLQMKIIEQEKEIAELKKQLNLLSQDKGVRDDGKGGVG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3267_a02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001134335

ORF Size: 1887 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_001134335.1](#), [NP_001127807.1](#)

RefSeq Size: 4462 bp

RefSeq ORF: 1890 bp

Locus ID: 27102

UniProt ID: [Q9BQI3](#)

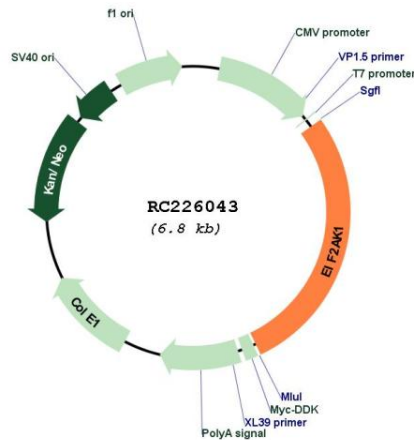
Cytogenetics: 7p22.1

Protein Families: Druggable Genome, Protein Kinase

MW: 71 kDa

Gene Summary: 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]

Product images:



Circular map for RC226043