

Product datasheet for **SC325192**

PKR (EIF2AK2) (NM_001135651) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKR (EIF2AK2) (NM_001135651) Human Untagged Clone
Tag:	Tag Free
Symbol:	EIF2AK2
Synonyms:	EIF2AK1; LEUDEN; PKR; PPP1R83; PRKR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



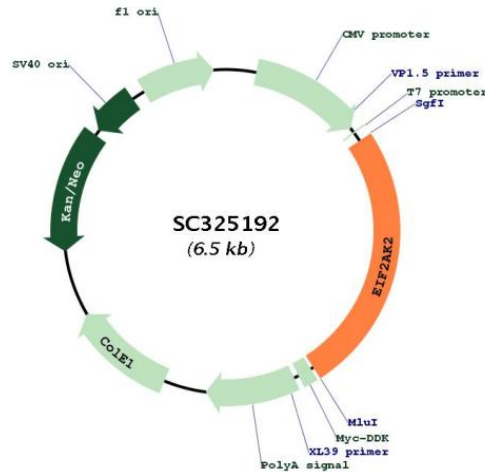
[View online »](#)

Fully Sequenced ORF: >SC325192 representing NM_001135651.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTGGTGATCTTTCAGCAGGTTTCTTCATGGAGGAACCTAATACATACCGTCAGAAGCAGGGAGTA
GTACTTAAATATCAAGAAGCTGCCTAATTCAGGACCTCCACATGATAGGAGTTTACATTTCAAGTTATA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC

Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001135651

Insert Size: 1656 bp

OTI Disclaimer: 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001135651.2](#)

RefSeq Size: 4127 bp

RefSeq ORF: 1656 bp

Locus ID: 5610

UniProt ID: [P19525](#)

Cytogenetics: 2p22.2

Protein Families: Druggable Genome, Protein Kinase, Transcription Factors

MW: 62.1 kDa

Gene Summary: The protein encoded by this gene is a serine/threonine protein kinase that is activated by autophosphorylation after binding to dsRNA. The activated form of the encoded protein can phosphorylate translation initiation factor EIF2S1, which in turn inhibits protein synthesis. This protein is also activated by manganese ions and heparin. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

Transcript Variant: This variant (2) uses a different splice site in the 5' UTR, compared to variant 1. Variants 1 and 2 both encode the same protein (isoform a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.