

## Recombinant Human EIF2AK2

**Cat. No.** EIF2AK2-31020TH    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant fragment, corresponding to amino acids 252-551 of Human PKR with N-terminal proprietary tag expressed in a Baculovirus infected Sf9 cell expression system, MWt 64kDa.
<b>Species</b>	Human
<b>ProteinLength</b>	252-551 a.a.
<b>Description</b>	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.
<b>Biological activity</b>	The Specific activity of EIF2AK2-31020TH was determined to be 53-59 nmol/min/mg dependent on lot.
<b>Form</b>	Liquid
<b>Storage buffer</b>	Preservative: None Constituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium chloride, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, pH 7.5
<b>Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

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**Sequence Similarities** Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily. Contains 2 DRBM (double-stranded RNA-binding) domains. Contains 1 protein kinase domain.

## GENE INFORMATION

**Gene Name** EIF2AK2 eukaryotic translation initiation factor 2-alpha kinase 2 [ Homo sapiens ]

**Official Symbol** EIF2AK2

**Synonyms** EIF2AK2; eukaryotic translation initiation factor 2-alpha kinase 2; PRKR, protein kinase, interferon inducible double stranded RNA dependent; interferon-induced, double-stranded RNA-activated protein kinase; EIF2AK1; PKR;

**Gene ID** 5610

**mRNA Refseq** NM\_001135651

**Protein Refseq** NP\_001129123

**MIM** 176871

**Uniprot ID** P19525

**Chromosome Location** 2p22-p21

**Pathway** Ceramide signaling pathway, organism-specific biosystem; Hepatitis C, organism-specific biosystem; Hepatitis C, conserved biosystem; Herpes simplex infection, organism-specific biosystem; Herpes simplex infection, conserved biosystem;

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**Function**

ATP binding; double-stranded RNA binding; eukaryotic translation initiation factor  
2alpha kinase activity; non-membrane spanning protein tyrosine kinase activity;  
nucleotide binding;

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