

Recombinant Human EIF2AK2

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

SPECIFICATION

Product Overview	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.
Species	Human
ProteinLength	252-551 a.a.
Description	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.
Biological activity	The Specific activity of EIF2AK2-31020TH was determined to be 53-59 nmol/min/mg dependent on lot.
Form	Liquid
Storage buffer	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
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**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;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Function

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA