

Active Recombinant Human EIF2AK2 protein, His-tagged

Cat. No. EIF2AK2-563H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human EIF2AK2 protein(P19525)(224~502 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	224-502 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Protein Kinase R (PKR) is activated by double-stranded RNA (dsRNA), the synthesis of which is caused virally. PKR can also be activated by the protein PACT or by heparin. It plays a key role in the innate immune response to viral infection and is also involved in the regulation of signal transduction, apoptosis, cell proliferation and differentiation. Besides, Cyclin Dependent Kinase 1 (CDK1) has been identified as an interactor of PKR, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PKR and recombinant human CDK1. Briefly, PKR were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to CDK1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PKR pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate

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solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μ stop solution to the wells and read at 450nm immediately. The binding activity of of PKR and CDK1 was shown, and this effect was in a dose dependent manner.

Molecular Mass 35.8kDa

Purity > 80% as determined by SDS-PAGE.

Storage Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.

Reconstitution Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

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; p68 kinase; eIF-2A protein kinase 2; P1/eIF-2A protein kinase; tyrosine-protein kinase EIF2AK2; interferon-inducible eIF2alpha kinase; double stranded RNA activated protein kinase; protein kinase, interferon-inducible double stranded RNA dependent; PRKR; MGC126524;

Gene ID 5610

mRNA Refseq NM_001135651

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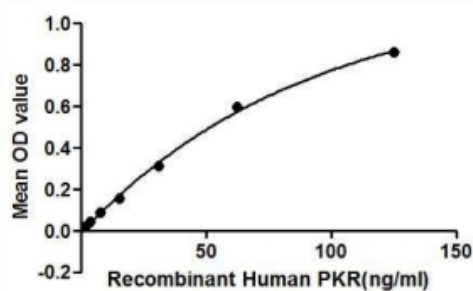
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Protein Refseq NP_001129123

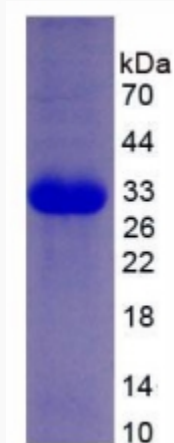
MIM 176871

UniProt ID P19525

Activity



SDS-PAGE



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