

Product datasheet

Recombinant human PKR protein ab85838

4 Images

Description

Product name	Recombinant human PKR protein
Biological activity	The Specific activity of ab85838 was determined to be 53-59 nmol/min/mg dependent on lot.
Purity	> 80 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Amino acids	252 to 551
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab85838** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot Functional Studies SDS-PAGE
Form	Liquid
Additional notes	ab64311 (Myelin Basic Protein protein) can be utilized as a substrate for assessing kinase activity

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

Function

Following activation by double-stranded RNA in the presence of ATP, the kinase becomes autophosphorylated and can catalyze the phosphorylation of the translation initiation factor EIF2S1, which leads to an inhibition of the initiation of protein synthesis. Double-stranded RNA is generated during the course of a viral infection.

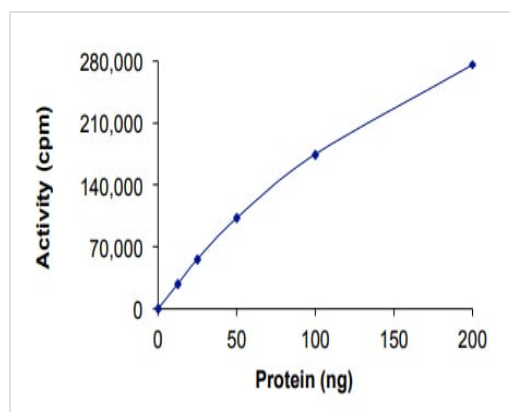
Sequence similarities

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.

Post-translational modifications

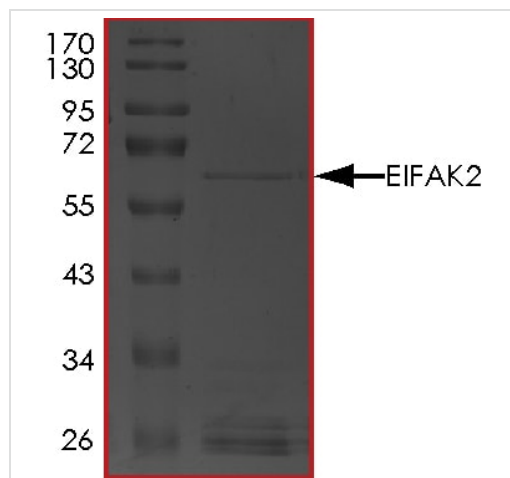
Autophosphorylated on several Ser and Thr residues. Autophosphorylation of Thr-451 is dependent on Thr-446 and is stimulated by dsRNA binding and dimerization. Autophosphorylation apparently leads to the activation of the kinase.

Images



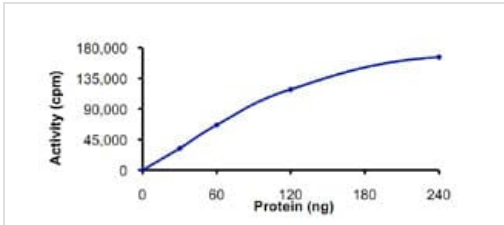
The specific activity of PKR (ab85838) was determined to be 68 nmol/min/mg as per activity assay protocol

Functional Studies - Recombinant human PKR protein (ab85838)



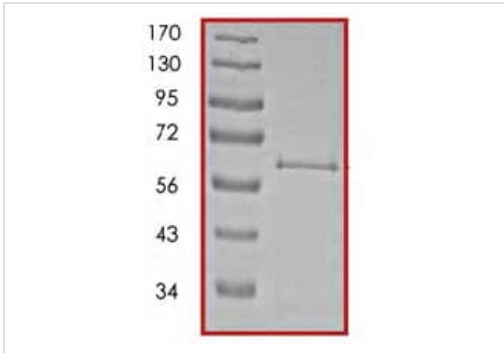
SDS PAGE analysis of ab85838

SDS-PAGE - Recombinant human PKR protein (ab85838)



Sample Kinase Activity Plot.

Functional Studies - Recombinant human PKR protein (ab85838)



SDS-PAGE showing ab85838 at approximately 64kDa.

SDS-PAGE - Recombinant human PKR protein (ab85838)

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