

Product datasheet

Recombinant Human PACT (PKR activating protein) / PRKRA ab152895

1 Image

Overview

<b>Product name</b>	Recombinant Human PACT (PKR activating protein) / PRKRA
<b>Protein length</b>	Protein fragment

Description

<b>Nature</b>	Recombinant
<b>Source</b>	Wheat germ
<b>Amino Acid Sequence</b>	
<b>Accession</b>	<a href="#">O75569</a>
<b>Species</b>	Human
<b>Sequence</b>	ANASICFAVPDPLMPDPSKQPKNQLNPIGSLQELAIHH GWRLPEYTLSQE GGPAHKREYTTICRLESFMETGKGASKKQAKRNAAEK FLAKFSNISPENH
<b>Molecular weight</b>	37 kDa including tags
<b>Amino acids</b>	101 to 200

Specifications

Our [Abpromise guarantee](#) covers the use of **ab152895** in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE ELISA Western blot
<b>Form</b>	Liquid
<b>Additional notes</b>	Protein concentration is above or equal to 0.05 µg/µl.

Preparation and Storage

<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
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pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCl

## General Info

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### Function

Activates EIF2AK2/PKR in the absence of double stranded RNA (dsRNA), leading to phosphorylation of EIF2S1/EIF2-alpha and inhibition of translation and induction of apoptosis. Required for siRNA production by DICER1 and for subsequent siRNA-mediated post-transcriptional gene silencing. Does not seem to be required for processing of pre-miRNA to miRNA by DICER1.

### Involvement in disease

Defects in PRKRA are the cause of dystonia type 16 (DYT16) [MIM:612067]. DYT16 is an early-onset dystonia-parkinsonism disorder. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYT16 patients have progressive, generalized dystonia with axial muscle involvement, oro-mandibular (sardonic smile) and laryngeal dystonia and, in some cases, parkinsonian features.

### Sequence similarities

Belongs to the PRKRA family.

Contains 3 DRBM (double-stranded RNA-binding) domains.

### Domain

Self-association may occur via interactions between DRBM domains as follows: DRBM 1/DRBM 1, DRBM 1/DRBM 2, DRBM 2/DRBM 2 or DRBM 3/DRBM3.

### Post-translational modifications

Phosphorylated at Ser-246 in unstressed cells and at Ser-287 in stressed cells. Phosphorylation at Ser-246 appears to be a prerequisite for subsequent phosphorylation at Ser-287.

Phosphorylation at Ser-246 and Ser-287 are necessary for activation of EIF2AK2/PKR under conditions of stress.

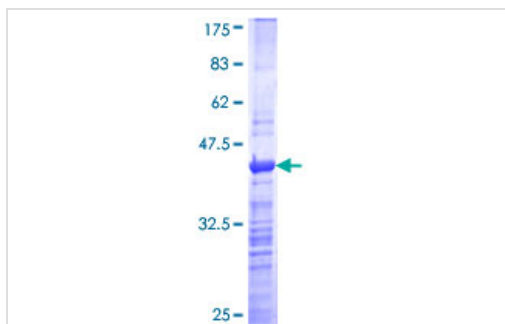
### Cellular localization

Cytoplasm > perinuclear region.

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## Images

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12.5% SDS-PAGE analysis of ab152895 stained with Coomassie Blue.

SDS-PAGE - Recombinant Human PACT (PKR activating protein) / PRKRA (ab152895)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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