# abcam

## Product datasheet

## Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224] ab75749

KO 評価済 リコンピナント RabMAb

#### 11 References 画像数 5

#### 製品の概要

製品名 Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224]

製品の詳細 Rabbit monoclonal [EPR3224] to PACT (PKR activating protein) / PRKRA

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt,ICC/IF or IP

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 4

Synthetic peptide within Human PACT (PKR activating protein)/ PRKRA aa 300-400 (C terminal).

The exact sequence is proprietary.

ポジティブ・コントロール

特記事項

免疫原

WB: HEK-293T, K562, Jurkat and HepG2 whole cell lysate (ab7900). IHC-P: Human brain tissue.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

## 製品の特性

製品の状態

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab75749の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		
IHC-P		

追加情報

IHC-P: 1/100 - 1/250. Perform heat mediated antigen retrieval using 0.01M Sodium Citrate

Buffer, pH 6.0 before commencing with IHC staining protocol.

WB: 1/1000 - 1/5000. Detects a band of approximately 34 kDa (predicted molecular weight: 34

kDa).

Is unsuitable for Flow Cyt, ICC or IP.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

### ターゲット情報

機能 Activates EIF2AK2/PKR in the absence of double stranded RNA (dsRNA), leading to

phosphorylation of EIF2S1/EFI2-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.

関連疾患 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.

**配列類似性** Belongs to the PRKRA family.

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

ドメイン 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.

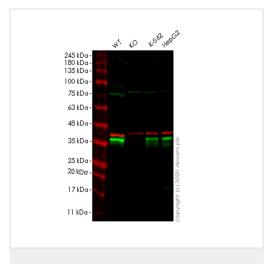
翻訳後修飾 Phosphorylated at Ser-246 in unstressed cells and at Ser-287 in stressed cells. Phosphorylation

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.

**細胞内局在** Cytoplasm > perinuclear region.



Western blot - Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224] (ab75749)

**All lanes :** Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224] (ab75749) at 1/1000 dilution

Lane 1: Wild-type HEK-293T cell lysate

Lane 2: PRKRA knockout HEK-293T cell lysate

Lane 3 : K-562 cell lysate

Lane 4 : HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

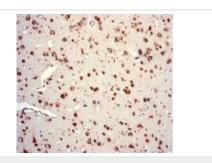
#### Secondary

**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 34 kDa Observed band size: 36 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab75749 observed at 36 kDa. Red - loading control **ab8245** observed at 36 kDa.

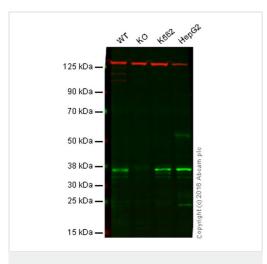
ab75749 Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224] was shown to specifically react with PACT in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line <a href="mailto:ab266806">ab266806</a> (knockout cell lysate <a href="mailto:ab258141">ab258141</a>) was used. Wild-type and PACT knockout samples were subjected to SDS-PAGE. ab75749 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated at room temperature for 2. 5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224] (ab75749)

ab75749 at 1/100 dilution staining PACT (PKR activating protein) / PRKRA in paraffin-embedded human brain tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-PACT (PKR activating protein) / PRKRA antibody [EPR3224] (ab75749)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

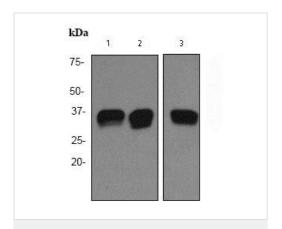
Lane 2: PACT (PKR activating protein)/PRKRA knockout HAP1 cell lysate (20 µg)

Lane 3: K562 cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab75749 observed at 36 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab75749 was shown to specifically react with PACT (PKR activating protein)/PRKRA when PACT (PKR activating protein)/PRKRA knockout samples were used. Wild-type and PACT (PKR activating protein)/PRKRA knockout samples were subjected to SDS-PAGE. ab75749 and <a href="mailto:ab18058">ab18058</a> (loading control to Vinculin) were diluted at 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse lgG H&L (IRDye® 680RD) <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-PACT (PKR activating protein) /

PRKRA antibody [EPR3224] (ab75749)

All lanes: Anti-PACT (PKR activating protein) / PRKRA antibody

[EPR3224] (ab75749) at 1/1000 dilution

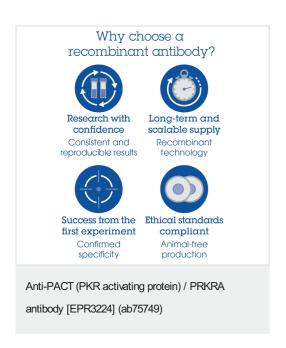
Lane 1 : K562 cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 34 kDa Observed band size: 34 kDa



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

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