

Product datasheet

Anti-PACT (PKR activating protein) / PRKRA antibody
 ab56444

2 Images

Overview

Product name	Anti-PACT (PKR activating protein) / PRKRA antibody
Description	Mouse monoclonal to PACT (PKR activating protein) / PRKRA
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein, corresponding to amino acids 1-314 of Human PACT (PKR activating protein)/ PRKRA

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None PBS, pH 7.2
Purity	Protein G purified
Clonality	Monoclonal
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab56444** in the following tested applications.

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

Application	Abreviews	Notes
WB		Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 34 kDa.
IHC-P		Use a concentration of 5 µg/ml.

Target

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.

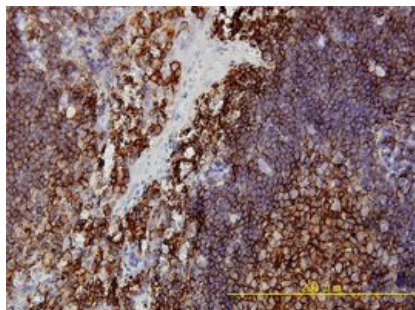
Post-translational modifications

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

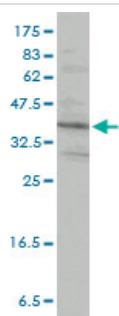
Cytoplasm > perinuclear region.

Images



PACT (PKR activating protein) / PRKRA antibody (ab56444) used in immunohistochemistry at 5ug/ml on formalin fixed and paraffin embedded human tonsil tissue.

IHC-P - PACT (PKR activating protein) / PRKRA antibody (ab56444)



Western blot - PACT (PKR activating protein) /
PRKRA antibody (ab56444)

Predicted band size : 34 kDa

PACT (PKR activating protein) / PRKRA
antibody (ab56444) at 1ug/lane + HeLa cell
lysate at 25ug/lane.

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