

## Product datasheet

# Anti-PDCD4 antibody [EPR3432] $\alpha$ b79405

**KO VALIDATED** Recombinant RabMAB<sup>®</sup>

[2 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-PDCD4 antibody [EPR3432]
<b>Description</b>	Rabbit monoclonal [EPR3432] to PDCD4
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC, Flow Cyt <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide within Human PDCD4 aa 400-500 (C terminal). The exact sequence is proprietary.
<b>Positive control</b>	Jurkat and HeLa cell lysates; human breast carcinoma tissue.
<b>General notes</b>	Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.  Our RabMAB <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMab<sup>®</sup> patents</a>  This product is a recombinant rabbit monoclonal antibody.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3432
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab79405** 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		1/5000 - 1/10000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
IHC-P		1/1000 - 1/2000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC		1/250 - 1/500.
Flow Cyt		1/50. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**Application notes** Is unsuitable for IP.

## Target

**Function** Inhibits translation initiation and cap-dependent translation. May exert its function by hindering the interaction between EIF4A1 and EIF4G. Inhibits the helicase activity of EIF4A. Modulates the activation of JUN kinase. Down-regulates the expression of MAP4K1, thus inhibiting events important in driving invasion, namely, MAPK85 activation and consequent JUN-dependent transcription. May play a role in apoptosis. Tumor suppressor. Inhibits tumor promoter-induced neoplastic transformation. Binds RNA.

**Tissue specificity** Up-regulated in proliferative cells. Highly expressed in epithelial cells of the mammary gland. Reduced expression in lung cancer and colon carcinoma.

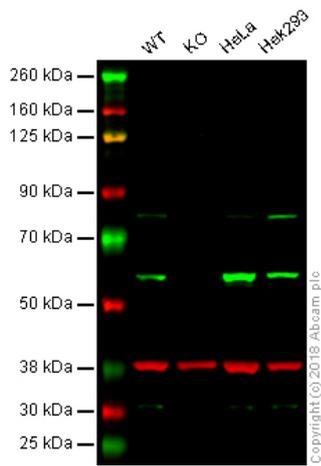
**Sequence similarities** Belongs to the PDCD4 family.  
Contains 2 MI domains.

**Domain** Binds EIF4A1 via both MI domains.

**Post-translational modifications** Polyubiquitinated, leading to its proteasomal degradation. Rapidly degraded in response to mitogens. Phosphorylation of the phosphodegron promotes interaction with BTRC and proteasomal degradation.

**Cellular localization** Nucleus. Cytoplasm. Shuttles between the nucleus and cytoplasm. Predominantly nuclear under normal growth conditions, and when phosphorylated at Ser-457. Exported from the nucleus in the absence of serum.

## Images



Western blot - Anti-PDCD4 antibody [EPR3432]  
(ab79405)

**Lane 1:** Wild-type HAP1 whole cell lysate (20  $\mu$ g)

**Lane 2:** PDCD4 knockout HAP1 whole cell lysate (20  $\mu$ g)

**Lane 3:** HeLa whole cell lysate (20  $\mu$ g)

**Lane 4:** HEK293 whole cell lysate (20  $\mu$ g)

**Lanes 1 - 4:** Merged signal (red and green).

Green - ab79405 observed at 52 kDa. Red - loading control, [ab9484](#), observed at 37 kDa.

ab79405 was shown to recognize PDCD4 in wild-type HAP1 cells as signal was lost at the expected MW in PDCD4 knockout cells.

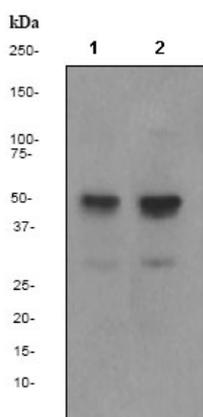
Additional cross-reactive bands were observed in the wild-type and knockout cells.

Wild-type and PDCD4 knockout samples were subjected to SDS-PAGE. ab79405 and [ab9484](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 5000 dilution and 1/20000 dilution respectively.

Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed

[ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#)

secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-PDCD4 antibody [EPR3432]  
(ab79405)

**All lanes :** Anti-PDCD4 antibody [EPR3432]  
(ab79405) at 1/10000 dilution

**Lane 1 :** Jurkat cell lysate

**Lane 2 :** HeLa cell lysate

Lysates/proteins at 10 µg per lane.

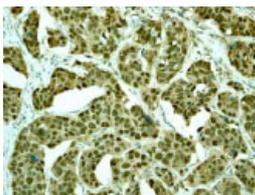
#### Secondary

**All lanes :** Goat anti-rabbit HRP at 1/2000  
dilution

**Predicted band size:** 52 kDa

**Observed band size:** 52 kDa

**Additional bands at:** 30 kDa. We are unsure  
as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-PDCD4 antibody  
[EPR3432] (ab79405)

ab79405 at 1/1000 dilution staining PDCD4 in  
human breast carcinoma by  
Immunohistochemistry using paraffin-  
embedded tissue.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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