**Product datasheet**

**Anti-PDCD4 (phospho S67) antibody ab73343**

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### Overview

**Product name**  Anti-PDCD4 (phospho S67) antibody

**Description**  Rabbit polyclonal to PDCD4 (phospho S67)

**Host species**  Rabbit

**Specificity**  ab73343 detects endogenous levels of PDCD4 only when phosphorylated at serine 67.

**Tested applications**  Suitable for: WB, ELISA, IHC-P

**Species reactivity**  Reacts with: Human

**Predicted to work with:**  Mouse, Rat

**Immunogen**  Synthetic phosphopeptide derived from human PDCD4 around the phosphorylation site of serine 67 (KNS<sup>S</sup>SR)

**Positive control**  HepG2 cell extract. This antibody gave a positive result in IHC in the following FFPE tissue: Human pancreas.

### Properties

**Form**  Liquid

**Storage instructions**  Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**Storage buffer**  pH: 7.40
Preservative: 0.02% Sodium azide
Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

Without Mg<sup>2+</sup> and Ca<sup>2+</sup>

**Purity**  Immunogen affinity purified

**Purification notes**  ab73343 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Clonality**  Polyclonal

**Isotype**  IgG

### Applications
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

Images

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<td>WB</td>
<td>1/500 - 1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).</td>
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<td>ELISA</td>
<td>1/5000.</td>
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<tr>
<td>IHC-P</td>
<td>Use a concentration of 5 µg/ml.</td>
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Our Abpromise guarantee covers the use of ab73343 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Western blot - Anti-PDCD4 (phospho S67) antibody (ab73343)

All lanes : Anti-PDCD4 (phospho S67) antibody (ab73343) at 1/500 dilution

Lane 1 : HepG2 cell extract
Lane 2 : HepG2 cell extract with immunising phosphopeptide at 10 µg

Lysates/proteins at 30 µg per lane.

Predicted band size: 52 kDa
Observed band size: 52 kDa
IHC image of PDCD4 (phospho S67) staining in Human normal pancreas formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab73343, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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