

### Certificate of Analysis

**Product:** Affinity Purified Anti-Pdcd4 [Rabbit]

**Code:** 600-401-965

**Lot #** 19706

**Size:** 100 µg

**Physical State:** Liquid (sterile filtered)

**Antibody Concentration:** 1.34 mg/ml (by UV absorbance at 280 nm)

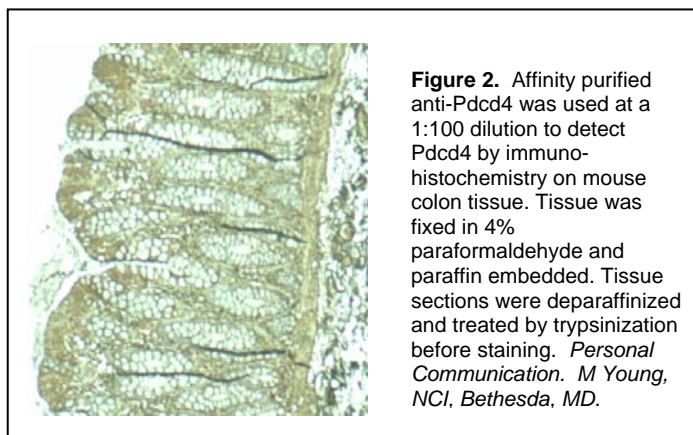
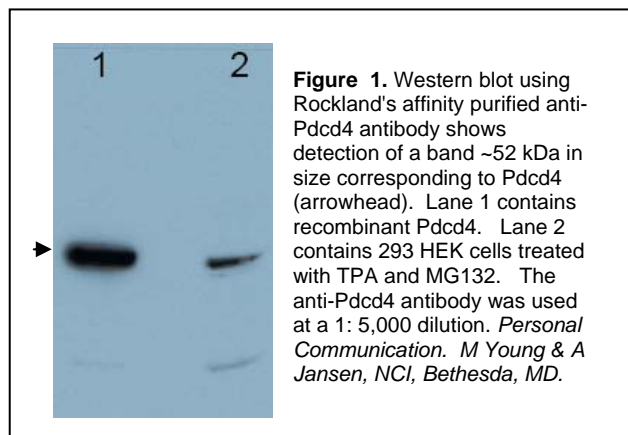
**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Stabilizer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one year from date of opening.

**Background Information:** Programmed cell death 4 (Pdcd4) is a novel tumor suppressor. Pdcd4 directly inhibits the helicase activity of eukaryotic translation initiation factor 4A (eIF4A), a component of the translation initiation complex. Pdcd4 also suppresses the transactivation of activator protein-1 (AP-1)-responsive promoters by c-Jun. Pdcd4 contains two Akt phosphorylation sites, one at Ser67 and the other at Ser457. The phosphorylation of Pdcd4 by Akt causes nuclear translocation of Pdcd4 and a significant decrease in the ability of Pdcd4 to interfere with the transactivation of AP-1-responsive promoters by c-Jun.



#### Recommended Dilutions:

<b>ELISA</b>	1:10,000 - 1:50,000
<b>WESTERN BLOT</b>	1:1,000 - 1:10,000
<b>IMMUNOHISTOCHEMISTRY</b>	1:100 - 1:300
<b>OTHER APPLICATIONS</b>	User Optimized

**Application Note(s):** This affinity purified antibody has been tested for use in ELISA, western blotting and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 52 kDa in size corresponding to Pcd4 protein by western blotting in the appropriate cell lysate or extract.

**Purity and Specificity:** This affinity purified antibody is directed against human Pcd4 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Pcd4 from human, mouse, rat and Xenopus based on 100% homology with the immunizing sequence. Cross-reactivity with Pcd4 from other sources has not been determined. The antibody reacts with Pcd4 protein that is either phosphorylated or non-phosphorylated at Ser457.

**Immunogen:** This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding amino acids near the carboxyl terminus of human Pcd4 protein.

**Relevant Links:** NCBI [NP\\_055271](#) Swiss-Prot [O15501](#)

#### Related Products:

<a href="#">#611-703-127</a>	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
<a href="#">#611-132-122</a>	IRDye800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
<a href="#">#B501-0500</a>	500 g BLOTTO
<a href="#">#BSA-30</a>	500 ml 30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer)
<a href="#">#B304</a>	10 ml NORMAL GOAT SERUM (NGS)
<a href="#">#KIA-003</a>	<b>MaxTag™</b> Anti-RABBIT IgG Kit for Immunoblotting
<a href="#">#MB-070</a>	Blocking Buffer for Fluorescent Western Blotting

#### General References:

Jansen AP, Camalier CE, Colburn NH (2005) Epidermal expression of the translation inhibitor programmed cell death 4 suppresses tumorigenesis. *Cancer Res.* **65** (14): 6034-6041.

Palamarchuk A, Efanov A, Maximov V, Aqeilan RI, Croce CM, Pekarsky Y (2005) Akt phosphorylates and regulates Pcd4 tumor suppressor protein. *Cancer Res.* **65** (24): 11282-11286.

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.

All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

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