

PDCD4 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat PDCD4 (CT)

Instruction Manual

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| Catalog Number | PK-AB718-3975 |
| Synonyms | PDCD4 Antibody: Programmed cell death 4, neoplastic transformation inhibitor |
| Description | Apoptosis, also known as programmed cell death, plays major roles in development and normal tissue turnover in addition to tumor formation. During this process, the expression patterns of numerous genes are radically altered. One such gene is the programmed cell death protein 4 (PDCD4), whose expression was found to be upregulated in all cell lines following the onset of apoptosis. PDCD4 encodes a tumor suppressor protein whose expression is lost in carcinomas of breast, colon, lung and prostate. It can bind to and inhibit the helicase activity of the eukaryotic translation initiation factor 4A and inhibit the transactivation and transformation mediated by the transcription factor AP-1. The kinase Akt regulates PDCD4 by phosphorylation, decreasing the ability of PDCD4 to interfere with the transactivation of AP-1-responsive promoter by c-Jun. There are two known isoforms of PDCD4. |
| Quantity | 100 µg |
| Source / Host | Rabbit |
| Immunogen | PDCD4 antibody was raised against a 19 amino acid peptide from near the carboxy terminus of human PDCD4. |
| Purification Method | Affinity chromatography purified via peptide column. |
| Clone / IgG Subtype | Polyclonal antibody |
| Species Reactivity | Human, Mouse, Rat |
| Specificity | |
| Formulation | Antibody is supplied in PBS containing 0.02% sodium azide. |
| Reconstitution | During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap. |
| Storage & Stability | Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| Applications | E, WB, IHC INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. PDCD4 antibody can be used for detection of PDCD4 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. |
| Images | Available upon request. |
| References | Jin Z and El Deiry WS. Overview of cell death signaling pathways. <i>Cancer Biol. Ther.</i> 2004; 4:139-63. Shibihara K, Asano M, Ishida Y, et al. Isolation of a novel mouse gene MA-3 that is induced upon programmed cell death. <i>Gene</i> 1995; 166:297-301. Goke R, Barth P, Schmidt A, et al. Programmed cell death 4 suppresses CDK1/cdc2 via induction of p21 (Waf1/Cip1). <i>Am. J. Physiol. Cell Physiol.</i> 2004; 287:C1541-6. Yang HS, Jansen AP, Nair R, et al. The transformation suppressor Pdc4 is a novel translation initiation factor 4A binding protein that inhibits translation. <i>Mol. Cell Biol.</i> 2003; 23:26-37. |
| Images | Available upon request. |
| Related Products | PDCD4 Peptide, Cat.No. PK-AB718-3975P A20 Cell Lysate, Cat. No. PK-AB718-1288 |

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