SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
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[Primary Antibody]

Rabbit Anti-PDCD4 antibody

Catalog Number: SL1608R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	PDCD4
Immunogen:	KLH conjugated synthetic peptide derived from human PDCD4: 1-100/469
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 ICC/IF=1:100-500 IF=1:100-500 Flow-Cyt=2ug/Test （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human, Mouse, Rat
Predicted MW.:	52kDa
Subcellular Location:	The nucleus cytoplasmic
Background:	This gene encodes a protein localized to the nucleus in proliferating cells. Expression of this gene is modulated by cytokines in natural killer and T cells. The gene product is thought to play a role in apoptosis but the specific role has not yet been determined. Two transcripts encoding different isoforms have been identified. Alternative names: H731; MGC33046; MGC33047; Neoplastic transformation inhibitor; Neoplastic transformation inhibitor protein; Nuclear antigen H731; Nuclear antigen H731 like; Nuclear antigen H731 like protein; OTTHUMP00000020483; PDCD 4; Programmed cell death 4; programmed cell death 4 (neoplastic transformation inhibitor) ; Programmed cell death protein 4; Protein 197/15a ; RP11 348N5.4 .

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	Function: Inhibits translation initiation and cap-dependent translation. May excert 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 (By similarity). **Subunit:** Interacts (via MI domains) with EIF4A2 (By similarity). Interacts (via MI domains) with EIF4A1 (via N-terminal domain). Heterotrimer with EIF4A1; one molecule of PDCD4 binds two molecules of EIF4A1. Interacts with EIF4G1. May form a complex with EIF4A1 and EIF4G1. The interaction between PDCD4 and EIF4A1 interferes with the interaction between EIF4A1 and EIF4G. When phosphorylated, interacts with BTRC and FBXW11. **Subcellular Location:** Nucleus. Cytoplasm. Note=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. **Tissue Specificity:** Up-regulated in proliferative cells. Highly expressed in epithelial cells of the mammary gland. Reduced expression in lung cancer and colon carcinoma. **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. Phosphorylated at Ser-67 by RPS6KB1 in response to mitogens; phosphorylation promotes proteasomal degradation of PDCD4. **Similarity:** Belongs to the PDCD4 family. Contains 2 MI domains. **Database links:** **Entrez Gene:** 27250 Human **Entrez Gene:** 18569 Mouse **Entrez Gene:** 64031 Rat Omim: 608610 Human **SwissProt:** Q53EL6 Human **SwissProt:** Q61823 Mouse **SwissProt:** Q9JID1 Rat **Unigene:** 711490 Human **Unigene:** 1605 Mouse **Unigene:** 375091 Mouse

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	Unigene: 206228 Rat Programmed cell death factor 4 is a newly discovered tumor suppressor gene，It shows differential expression in many Tumour tissues.

[VALIDATION IMAGES]

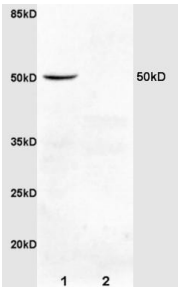


Figure 1. Sample: Lane1: Kidney(Rat) Lysate at 30 ug Lane2: Colon carcinoma(Mouse) Lysate at 30 ug Primary: Anti-PDCD4 (SL1608R) at 1:200 dilution; Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1:3000 dilution; Predicted band size: 50kD Observed band size: 50kD

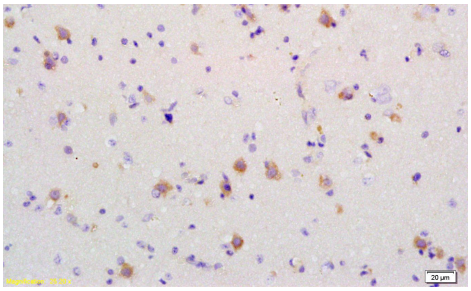


Figure 2. Tissue/cell: human glioma tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-PDCD4 Polyclonal Antibody, Unconjugated(SL1608R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

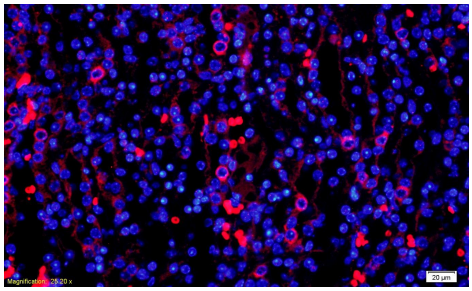


Figure 3. Tissue/cell: mouse kidney tissue;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-PDCD4 Polyclonal Antibody, Unconjugated(SL1608R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei

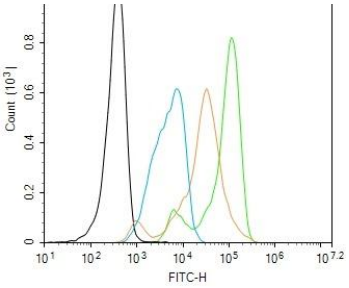


Figure 4. Blank control (black line) :HepG2. Primary Antibody (green line): Rabbit Anti-PDCD4 antibody (SL1608R) Dilution:2ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature.Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed

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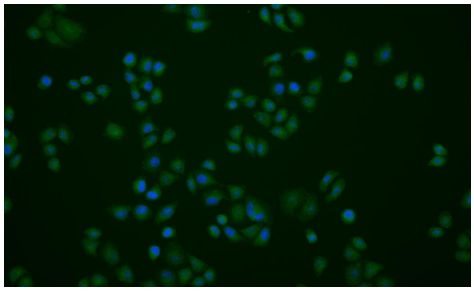


Figure 5. HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (PDCD4) polyclonal Antibody, Unconjugated (SL1608R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei

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