

## PDCD5 Antibody

*PDCD5 (CT): Programmed cell death protein 5, TFAR19, MGC9294*

**CATALOG No.: 5011**

### Background:

Programmed cell death 5 (PDCD5), a human apoptosis-related protein, is thought to play an early and universal role in apoptosis (1). PDCD5 is widely expressed and is upregulated in cells undergoing apoptosis, where it translocates rapidly from the cytoplasm to the nucleus (2). PDCD5 has a compact core structure of low flexibility with two mobile alpha-helices at N-terminal and a flexible unstructured C-terminal region (3). The charged residues are crucial for the ability of apoptosis-promoting and cell translocation of the protein. PDCD5 can facilitate apoptosis and enhance TAJ/TROY-induced paraptosis-like cell death (4). PDCD5 may play a dual role in the Tip60 pathway. It interacts with Tip60 and functions as a Tip60 co-activator to promote apoptosis (5). The nucleotide polymorphisms in the 5'-upstream region of PDCD5 affect promoter activity and the susceptibility of a Chinese population to develop chronic myelogenous leukemia and may represent a novel tumor suppressor gene influencing lung cancer (6).

### SOURCE:

Rabbit polyclonal PDCD5 antibody was raised against a 21 amino acid peptide from near the carboxy terminus of human PDCD5 (GenBank accession no. NP\_037365).

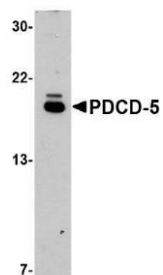
### APPLICATION:

PDCD5 antibody can be used for detection of PDCD5 by Western blot at 1 µg/ml. (Optimal dilution should be determined by user.) EL4 cell lysate can be used as positive control. PDCD5 antibody is human, mouse and rat reactive.

**For research use only.**

### STORAGE:

PDCD5 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of PDCD5 in EL4 cell lysate with PDCD5 antibody at 1 µg/ml.

Immunocytochemistry of PDCD5 in Jurkat cells with PDCD5 antibody at 2 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **5011P**.  
EL4 Cell Lysate, Catalog No. **1287**.  
PDCD5 Antibody (NT), Catalog No. **5019**.  
PD-1 Antibody (CT), Catalog No. **4065**.  
Dact2 Antibody, Catalog No. **4859**

### REFERENCES:

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2. Chen Y, Sun R, Han W, et al. Nuclear translocation of PDCD5 (TFAR19): an early signal for apoptosis? *FEBS Lett.* 2001; 509:191–6.
3. Yao H, Xu L, Feng Y, et al. Structure-function correlation of human programmed cell death 5 protein. *Arch. Biochem. Biophys.* 2009 Apr 7.
4. Wang Y, Li X, Wang L, et al. An alternative form of paraptosis-like cell death triggered by TAJ/TROY and enhanced by PDCD5 overexpression. *J. Cell Sci.* 2004; 117:1525–32.
5. Xu L, Chen Y, Song Q, et al. PDCD5 interacts with Tip60 and functions as a cooperator in acetyltransferase activity and DNA damage-induced apoptosis. *Neoplasia* 2009; 11:345–54.
6. Spinola M, Meyer P, Kammerer S, et al. Association of the PDCD5 locus with lung cancer risk and prognosis in smokers. *J. Clin. Oncol.* 2006; 24:1672–8. (09-01D)