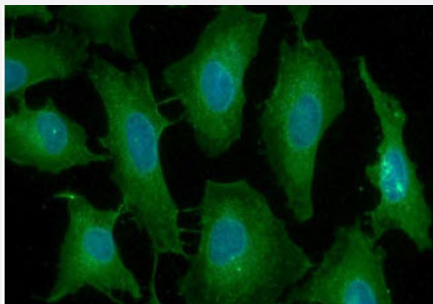


PDCD1 monoclonal antibody, clone 4F12

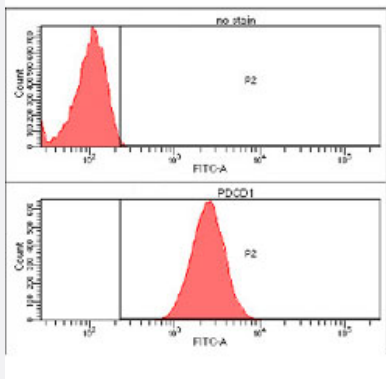
Catalog # MAB1117 Size 100 uL

Applications



Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with PDCD1 monoclonal antibody, clone 4F12 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



Flow Cytometry

Flow cytometry analysis of HeLa cell line, staining at 2-5 ug for 1x10⁶ cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant PDCD1.
Immunogen	Recombinant protein corresponding to amino acids 21-167 of human PDCD1.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification

Isotype	IgG2b, kappa
Recommend Usage	ELISA Flow Cytometry Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

- Immunocytochemistry

- Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with PDCD1 monoclonal antibody, clone 4F12 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometry analysis of HeLa cell line, staining at 2-5 ug for 1x10⁶ cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

Gene Info — PDCD1

Entrez GeneID	5133
GeneBank Accession#	BC074740
Protein Accession#	AAH74740
Gene Name	PDCD1
Gene Alias	CD279, PD1, SLEB2, hPD-1, hPD-I

Gene Description	programmed cell death 1
Omim ID	152700 600244
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a cell surface membrane protein of the immunoglobulin superfamily. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. In mice, expression of this gene is induced in the thymus when anti-CD3 antibodies are injected and large numbers of thymocytes undergo apoptosis. Mice deficient for this gene bred on a BALB/c background developed dilated cardiomyopathy and died from congestive heart failure. These studies suggest that this gene product may also be important in T cell function and contribute to the prevention of autoimmune diseases. [provided by RefSeq]
Other Designations	-

Publication Reference

- [Immunohistochemical analysis and prognostic significance of PD-L1, PD-1, and CD8+ tumor-infiltrating lymphocytes in Ewing's sarcoma family of tumors \(ESFT\).](#)

Machado I, López-Guerrero JA, Scotlandi K, Picci P, Lombart-Bosch A.

Virchows Archiv : an International Journal of Pathology 2018 May; 472(5):815.

- [PD-1 immunoreceptor inhibits B cell receptor-mediated signaling by recruiting src homology 2-domain-containing tyrosine phosphatase 2 to phosphotyrosine.](#)

Okazaki T, Maeda A, Nishimura H, Kurosaki T, Honjo T.

PNAS 2001 Nov; 98(24):13866.

Application: Flow Cyt, Func, Mouse, Mouse A20 B cell lymphoma IIA1.6

- [PD-1: an inhibitory immunoreceptor involved in peripheral tolerance.](#)

Nishimura H, Honjo T.

Trends in Immunology 2001 May; 22(5):265.

Application: WB, Human, Human thymocytes

- [PD-L2 is a second ligand for PD-1 and inhibits T cell activation.](#)

Latchman Y, Wood CR, Chernova T, Chaudhary D, Borde M, Chernova I, Iwai Y, Long AJ, Brown JA, Nunes R, Greenfield EA, Bourque K, Boussiotis VA, Carter LL, Carreno BM, Malenkovich N, Nishimura H, Okazaki T, Honjo T, Sharpe AH, Freeman GJ.

Nature Immunology 2001 Mar; 2(3):261.

Application: Flow Cyt, Mouse, CHO cells

Pathway

- [Cell adhesion molecules \(CAMs\)](#)
- [T cell receptor signaling pathway](#)

Disease

- [Addison Disease](#)
- [Alveolitis](#)
- [Arthritis](#)
- [Autoimmune Diseases](#)
- [Carcinoma](#)
- [Choriocarcinoma](#)
- [Colitis](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Genetic Predisposition to Disease](#)
- [Graves Disease](#)
- [Hydatidiform Mole](#)
- [Inflammation](#)
- [Kidney Diseases](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)

- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)
- [Myocardial Infarction](#)
- [Neovascularization](#)
- [Polyendocrinopathies](#)
- [Spondylitis](#)
- [Uterine Cervical Neoplasms](#)
- [Uveomeningoencephalitic Syndrome](#)
- [Vasculitis](#)
- [Wegener Granulomatosis](#)