

## Product datasheet for **UM800114CF**

### PD1 (PDCD1) Mouse Monoclonal Antibody [Clone ID: UMAB222]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB222
Applications:	10k-ChIP, FC, Neutralize, WB
Recommended Dilution:	IHC 1:100, FLOW 1:50
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PDCD1 (NP_005009) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	29.2 kDa
Gene Name:	Homo sapiens programmed cell death 1 (PDCD1), mRNA.
Database Link:	<a href="#">NP_005009</a> <a href="#">Entrez Gene 18566 Mouse</a> <a href="#">Entrez Gene 5133 Human</a> <a href="#">Q15116</a>



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**Background:**

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, Jul 2008]

**Synonyms:**

CD279; hPD-1; hPD-I; hSLE1; PD-1; PD1; SLEB2

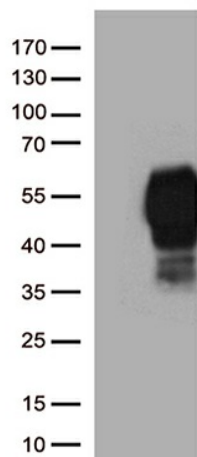
**Protein Families:**

Druggable Genome, Transmembrane

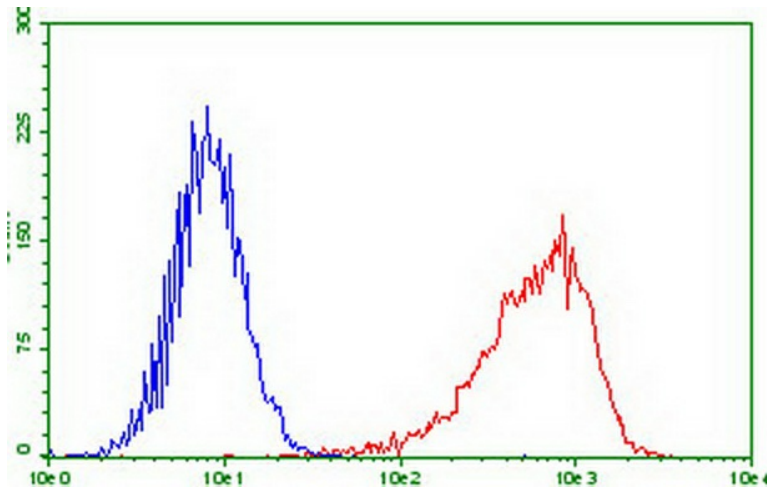
**Protein Pathways:**

Cell adhesion molecules (CAMs), T cell receptor signaling pathway

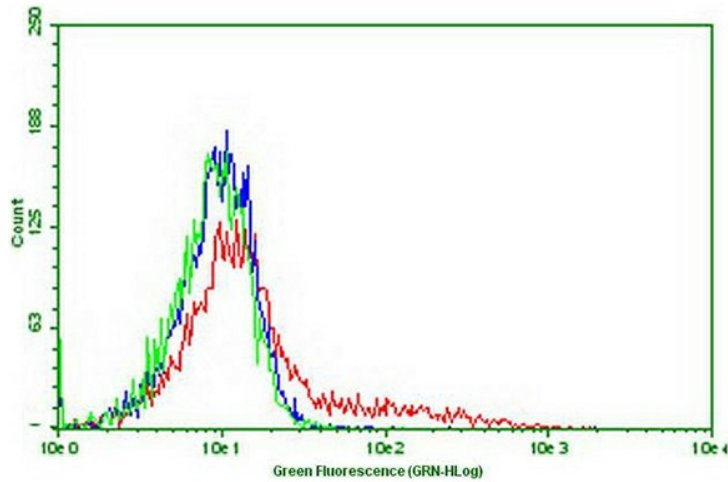
**Product images:**



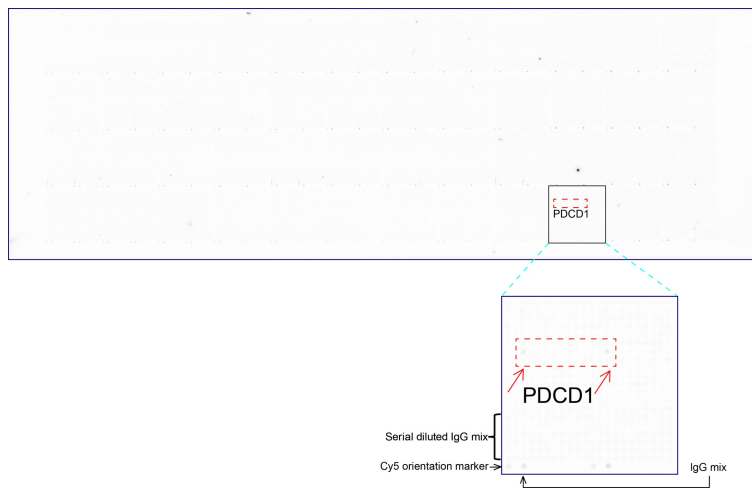
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PDCD1 ([RC210364], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDCD1 antibody (1:2000).



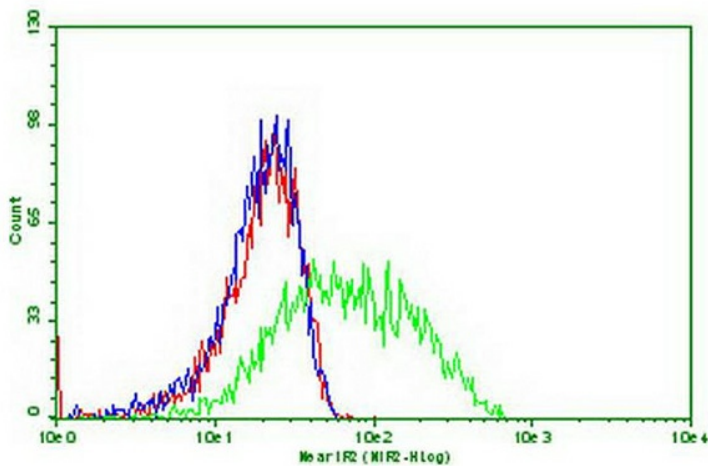
Flow cytometric Analysis of stable expression PD1 cells using anti-PDCD1 antibody ([UM800114]) (Red) compared to a nonspecific negative control antibody (Blue) (1:50).



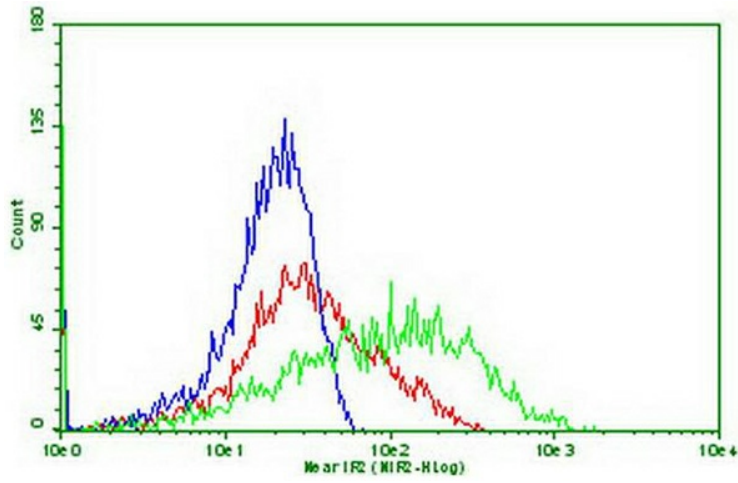
HEK293T cells transfected with either mouse PD1 ([MR227347]) overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PDCD1 antibody ([UM800114]), compared to a nonspecific negative control antibody (green), and then analyzed by flow cytometry (1:50).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-PDCD1 mouse monoclonal antibody ([UM800114]). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification (1:100).



Flow cytometric Analysis of stable expression PDL1 ([RC213071]) cells using anti-PDCD1 antibody ([UM800114]) (blue) or 0.3ug/ml PD1-Fc fusion protein ([TP700199]) (green) or both (red), and detected by anti-Fc (human) IgG-FITC (1:50).



Flow cytometric Analysis of PDL2 ([RC224141]) transiently transfected HEK293T cells using anti-PDCD1 antibody ([UM800114]) (blue) or 1ug/ml PD1-Fc fusion protein ([TP700199]) (green) or both (red), and detected by anti-Fc (human) IgG-FITC (1:50).