

OriGene Technologies, Inc.

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Product datasheet for UM870090

PD1 (PDCD1) Mouse Monoclonal Antibody [Clone ID: UMAB198]

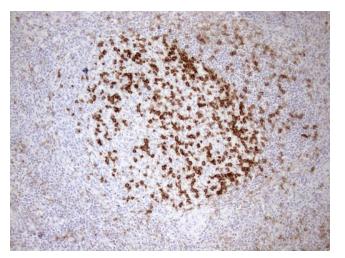
Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB198
Applications:	10k-ChIP, IF, IHC, WB
Recommended Dilution:	IHC 1:100~1200, WB 1:500, IF 1:100
Reactivity:	Human, Mouse, Monkey, Dog
Host:	Mouse
lsotype:	lgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PDCD1 (NP_005009) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.5~1.0 mg/ml (Lot Dependent)
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:	programmed cell death 1
Database Link:	<u>NP_005009</u> <u>Entrez Gene 18566 MouseEntrez Gene 486213 DogEntrez Gene 5133 Human</u> <u>Q15116</u>

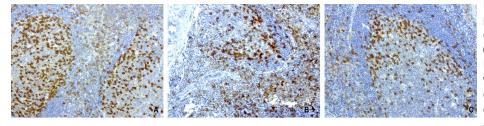


	PD1 (PDCD1) Mouse Monoclonal Antibody [Clone ID: UMAB198] – UM870090
Background:	This gene encodes a cell surface membrane protein of the immunoglobulin superfamily. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. In mice, expression of this gene is induced 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
Synonyms:	CD279; hPD-1; hPD-l; hSLE1; PD-1; PD1; SLEB2
Protein Familie	s: Druggable Genome, Transmembrane
Protein Pathwa	ys: Cell adhesion molecules (CAMs), T cell receptor signaling pathway

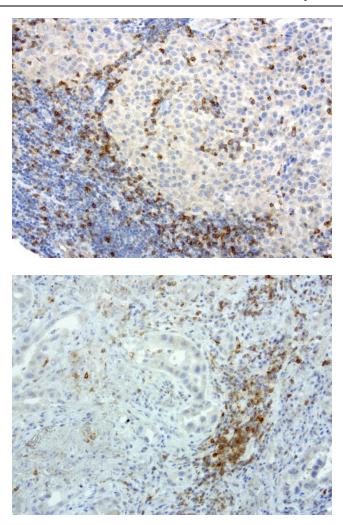
Product images:



Immunohistochemical staining of paraffinembedded Human tonsil using anti-PDCD1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 110°C for 10min, [UM800090]) (1:1200)

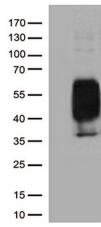


Immunohistochemical staining of 3 cases of paraffin-embedded human tonsil using anti-PD-1 clone UMAB198 mouse monoclonal antibody ([UM800090]) at 1:800 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Very strong cytoplasmic and membraneous staining in the activated Tcells of tonsil.

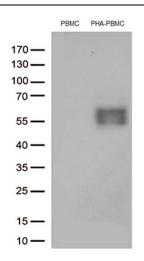


Immunohistochemical staining of paraffinembedded human melanoma using anti-PD-1 clone UMAB198 mouse monoclonal antibody ([UM800090]) at 1:800 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Very strong cytoplasmic and membraneous staining in the activated Tcells no staining on the tumor.

Immunohistochemical staining of paraffinembedded human lung cancer using anti-PD-1 clone UMAB198 mouse monoclonal antibody ([UM800090]) at 1:800 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Very strong cytoplasmic and membraneous staining in the activated Tcells no staining on the tumor.

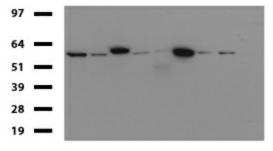


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PDCD1 ([RC210364], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDCD1 antibody (1:2000).



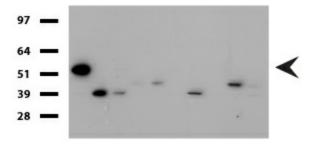
Western blot analysis of extracts (35ug) from PBMCs and PHA-stimulated-PBMCs by using anti-PDCD1 monoclonal antibody (1:250).





Western blot of cell lysates (35ug) from 9 different cell lines (1: HepG2, 2: HeLa, 3: SV-T2, 4: A549, 5: COS7, 6: Jurkat, 7: MDCK, 8: PC-12, 9: MCF7). Diluation: 1:500.

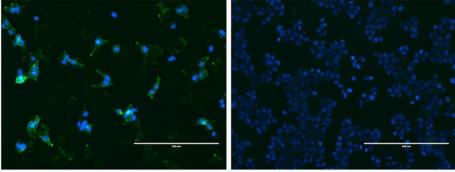
1 2 3 4 5 6 7 8 9 10



Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Thyroid, 7: Colon, 8: Spleen 9: Liver, 10: Ovary). Diluation: 1:500.

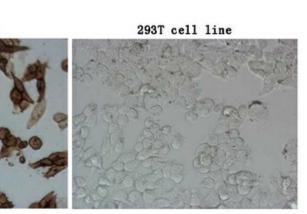
PD1 cell line

293T cell line

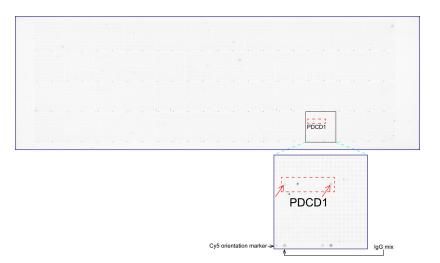


Immunofluorescent staining of PDCD1 ([RC210364])-stable-expression cells (left) labeling PDCD1 with mouse monoclonal antibody [UM800090] (1:100, green) and nucleus with Hoechst33342 (blue). HEK293T cells serve as negative control (right).





Immunocytochemistry staining of PDCD1 ([RC210364])-stable-expression cells (left) labeling PDCD1 with mouse anti-PDCD1 monoclonal antibody [UM800090] (1:900). The rihgt is negative control.



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-PDCD1 mouse monoclonal antibody ([UM800090]). 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).