

**PD1**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2750a**

**Specification**

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**PD1 - Product Information**

Application	<b>E, WB</b>
Primary Accession	<a href="#">O15116</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>Mouse IgG1</b>
Calculated MW	<b>31.6KD KDa</b>

**Immunogen**

Purified recombinant fragment of human PD1 (AA: extra 21-170) expressed in HEK293 cells.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**PD1 - Additional Information**

**Gene ID** 5133

**Other Names**

PDCD1; PD-1; CD279; SLEB2; hPD-1; hPD-l; hSLE1

**Dilution**

E~~ 1/10000  
WB~~ 1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PD1 is for research use only and not for use in diagnostic or therapeutic procedures.

**PD1 - Protein Information**

**Name** PDCD1 {ECO:0000303|PubMed:7851902, ECO:0000312|HGNC:HGNC:8760}

**Function**

Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self (PubMed:<a href="http://www.uniprot.org/citations/21276005" target="\_blank">21276005</a>). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:<a href="http://www.uniprot.org/citations/21276005" target="\_blank">21276005</a>). Following

T-cell receptor (TCR) engagement, PDCD1 associates with CD3-TCR in the immunological synapse and directly inhibits T-cell activation (By similarity). Suppresses T-cell activation through the recruitment of PTPN11/SHP-2: following ligand-binding, PDCD1 is phosphorylated within the ITSM motif, leading to the recruitment of the protein tyrosine phosphatase PTPN11/SHP-2 that mediates dephosphorylation of key TCR proximal signaling molecules, such as ZAP70, PRKCQ/PKtheta and CD247/CD3zeta (By similarity).

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**PD1 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PD1 - Images**

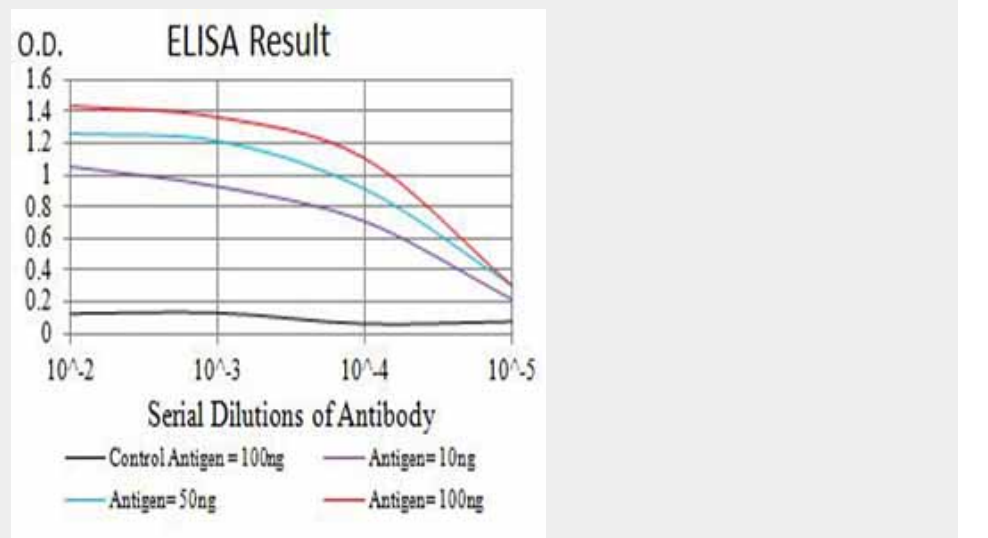


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

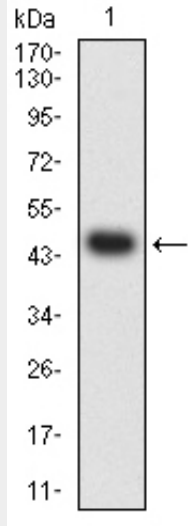


Figure 2:Western blot analysis using PD1 mAb against human PD1 (AA: extra 21-170) recombinant protein. (Expected MW is 46.6 kDa)

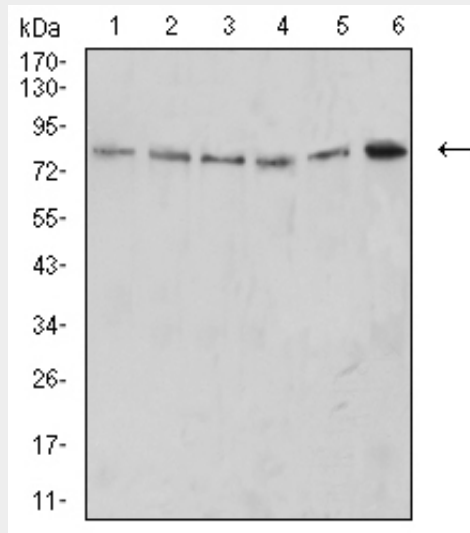


Figure 3:Western blot analysis using PD1 mouse mAb against MOLT4 (1), K562 (2), Ramos (3), HL-60 (4), THP-1 (5), and U937 (6) cell lysate.

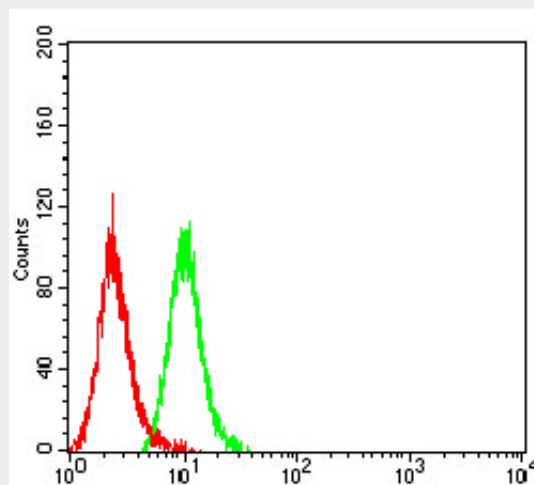


Figure 4:Flow cytometric analysis of HeLa cells using PD1 mouse mAb (green) and negative

control (red).

**PD1 - References**

1.PLoS One. 2016 Jul 26;11(7):e0159383.2.Tumour Biol. 2016 Jun;37(6):7507-14.