

PD1
Purified Mouse Monoclonal Antibody
Catalog # AO2749a

Specification

PD1 - Product Information

Application	E, WB, ICC
Primary Accession	Q15116
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2a
Calculated MW	31.6KD KDa

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
ICC~~ 1/200 - 1/1000

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:21276005). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:21276005). 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

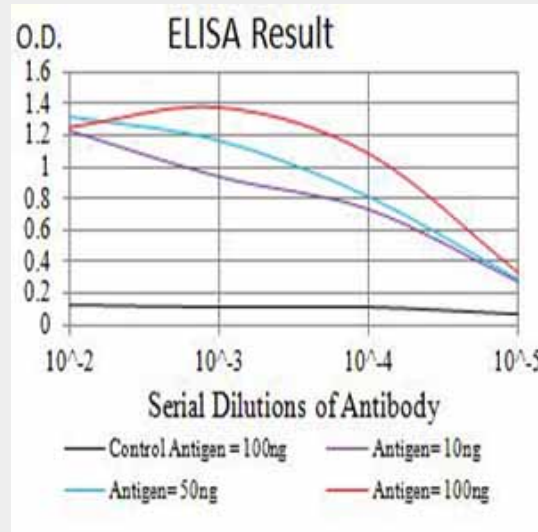


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

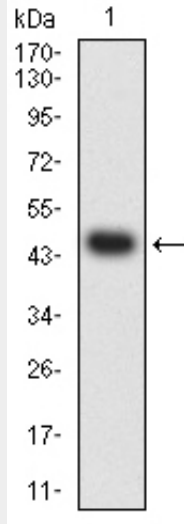


Figure 2:Western blot analysis using PD1 mAb against human PD1 (AA: extra 21-170) recombinant protein. (Expected MW is 46.6 kDa)

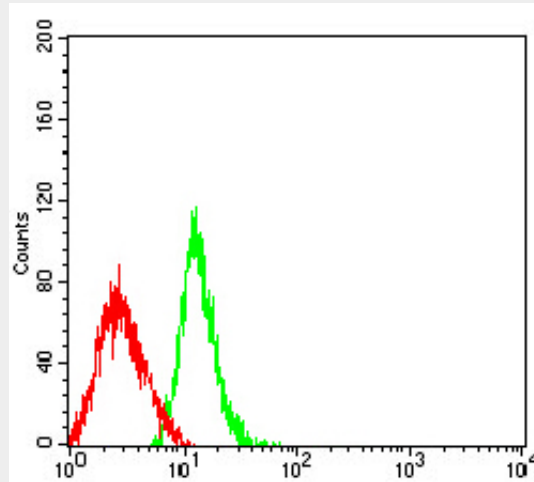


Figure 4:Flow cytometric analysis of HL-60 cells using PD1 mouse mAb (green) and negative control (red).

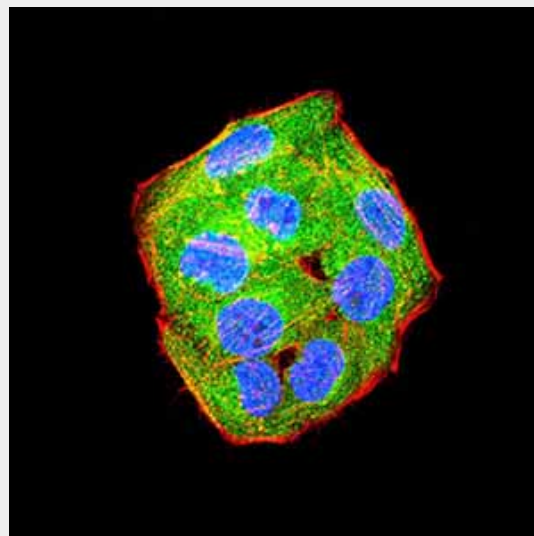


Figure 3:Immunofluorescence analysis of HeLa cells using PD1 mouse mAb (green). Blue: DRAQ5

fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

PD1 - References

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