

## 45-1074: Mouse Monoclonal Antibody to Human PD-1 (Clone : PD1.D3)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	PD1.D3
<b>Application :</b>	ELISA
<b>Gene :</b>	PDCD1
<b>Gene ID :</b>	5133
<b>Uniprot ID :</b>	Q15116
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Programmed cell death protein 1, Protein PD-1, hPD-1, CD279
<b>Isotype :</b>	Mouse IgG1,Kappa
<b>Immunogen Information :</b>	Recombinant human PD-1-Fc

### Description

Programmed cell death protein 1 (PD-1), is cell surface receptor expressing on T cells and pro-B cells. Binding of its two ligands PD-L1 and PD-L2 could result in down-regulation of the immune system by inhibiting the T-cell activation process. Thus, PD-1 is an important immune checkpoint and popular target for therapeutic antibodies against many cancers. Anti-Human PD-1 Antibody (PD1.D3), mAb, Mouse is produced from the hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from mouse immunized with recombinant human PD-1-Fc .

### Product Info

<b>Amount :</b>	40 µg
<b>Purification :</b>	Protein A chromatography
<b>Content :</b>	0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide.
<b>Storage condition :</b>	The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

### Application Note

**ELISA detection:** 0.01-0.1 µg/ml  
**ELISA blocking:** 10-15 µg/ml  
**Flow cytometry:** 5-10 µg/ml  
**Blockade of Receptor-ligand Interaction in Flow cytometry:** 5 µg/ml

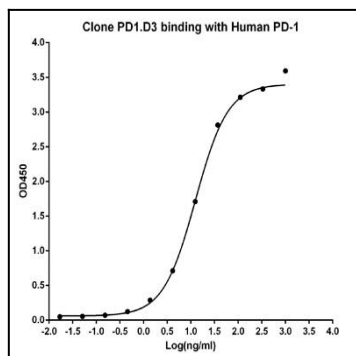


Figure-1 : ELISA binding of human PD-1 antibody (Clone: PD1.D3) with Human PD-1 recombinant protein. Coating antigen: PD-1-Fc, 1 $\mu$ g/ml. PD-1 antibody dilution start from 1000ng/ml, EC50= 12.5 ng/ml.

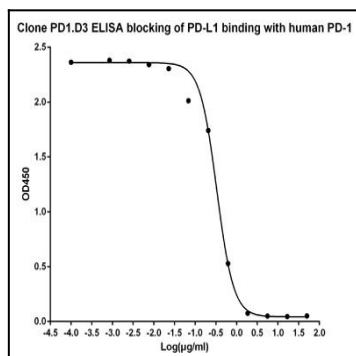


Figure-2 : ELISA blocking of human PD-1 antibody (Clone: PD1.D3) against Human PD-L1 recombinant protein binding with Human PD-1 recombinant protein, Coating antigen: PD-1-Fc at 1 $\mu$ g/ml, PD-L1-Fc final concentration: 0.5 $\mu$ g /ml, PD-1 antibody dilution start from 50 $\mu$ g/ml, IC50= 0.33 $\mu$ g/ml

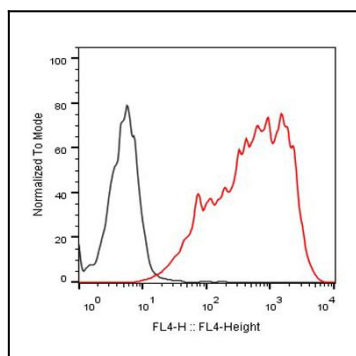


Figure-3 : Flow cytometric analysis of PD-1 Antibody (Clone: PD1.D3) on CHO-K1/PD1 stable cell expressing PD-1 (Red histogram) and CHO negative control cell (Black histogram) at 5  $\mu$ g/ml,  $2.5 \times 10^5$  cells/reaction, iFluor647 conjugated Goat Anti-Mouse IgG used as secondary antibody

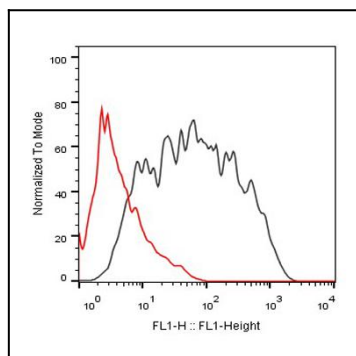


Figure-4 : FACS ligand blocking tests of PD-1 Antibody (Clone: PD1.D3) on the binding of human PD-1 cell line with Human PD-L1 (Red histogram), CHO negative control cell (Black histogram), Antibody working concentration: 5  $\mu$ g/ml,  $2.5 \times 10^5$  cells/reaction. Ligand (PD-L1) working concentration: 1  $\mu$ g/ml, Alexa Fluor 647 Conjugated Affinipure Goat anti-human IgG (H + L) used as secondary antibody