

## Product datasheet for **CF812993**

### PD-L1 (CD274) Mouse Monoclonal Antibody [Clone ID: OTI14H4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI14H4
Applications:	FC, WB
Recommended Dilution:	WB 1:500, FLOW 1:50~100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human CD274 (NP_054862) 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:	33.28 kDa
Gene Name:	CD274 molecule
Database Link:	<a href="#">NP_054862</a> <a href="#">Entrez Gene 29126 Human</a> <a href="#">Q9NZQ7</a>



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**Background:**

This gene encodes an immune inhibitory receptor ligand that is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The encoded protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

**Synonyms:**

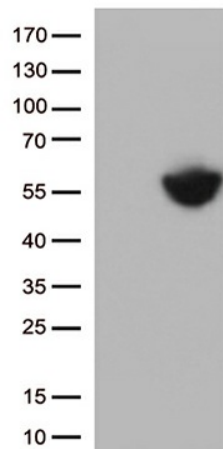
B7-H; B7H1; hPD-L1; PD-L1; PDCD1L1; PDCD1LG1; PDL1

**Protein Families:**

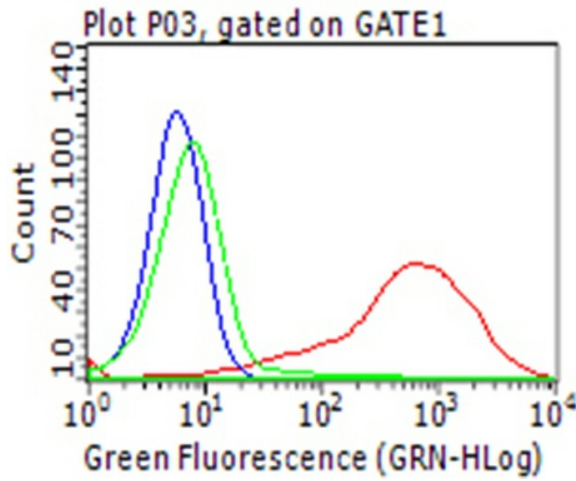
Druggable Genome, Transmembrane

**Protein Pathways:**

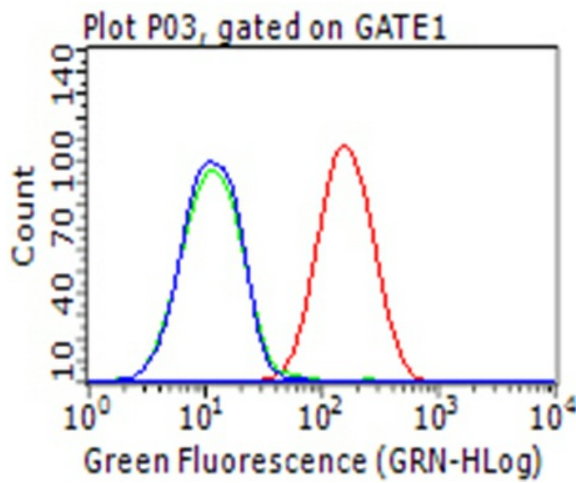
Cell adhesion molecules (CAMs)

**Product images:**

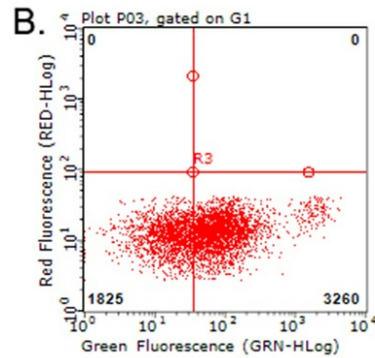
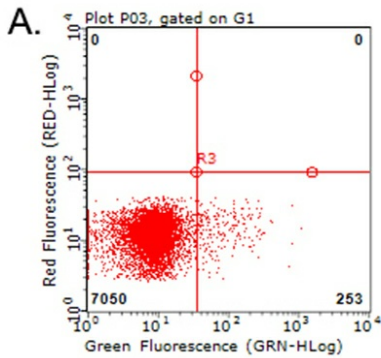
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CD274 ([RC213071], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD274 (1:500).



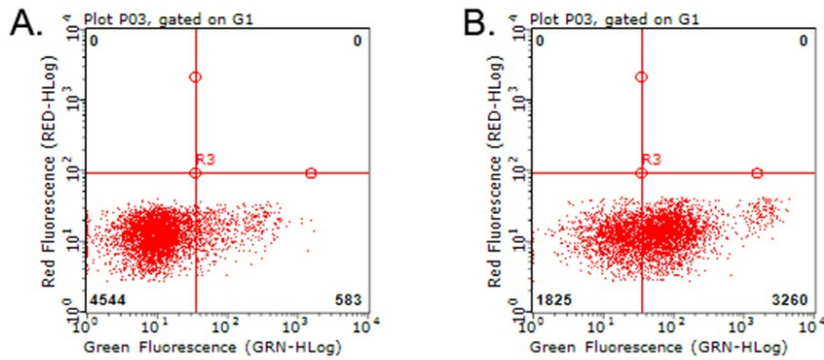
Flow cytometric analysis of the stable expression of CD274 plasmid ([RC213071]) in living 293T cells using anti-PDL1 antibody ([TA812993], red), compared to an isotype control (green), and a PBS control (blue) (1:100).



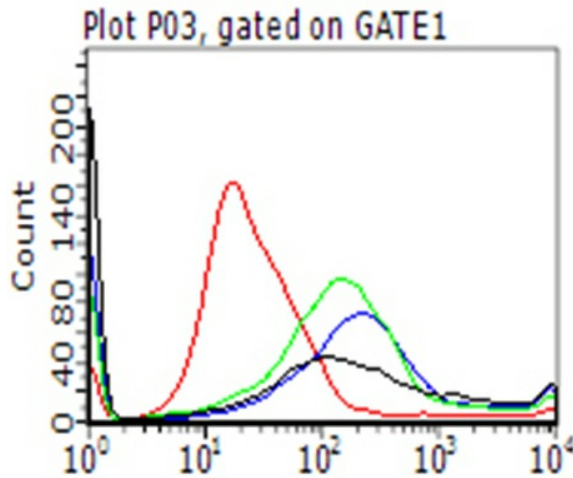
Flow cytometric analysis of living HCC78 cells, using anti-CD274 antibody ([TA812993], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).



Flow cytometric analysis of living PBMCs treated with 10ug/ml PHA for 72h (Right)/untreated (Left) using anti-PDL1 antibody ([TA812993]) (1:100).



Flow cytometric analysis of living PBMCs treated with 10ug/ml PHA for 72h (Right) using anti-PDL1 antibody ([TA812993]). Cells incubated with a non-specific antibody (Left) were used as isotype control (1:100).



Detection of PDL1 neutralizing antibody using MACS column. GFP+/PDL1+ 293T cells (co-transfected with PDL1 and GFP plasmid [RC213071], PS10010) were incubated with either PDL1 antibody [TA812993] (red), non-specific antibody (green), isotype control (blue) or PBS (black) and then mixed with PD1+ 293T cells ([RC210364]) linked with magnetic-beads. The mixed cells were pulled down using MACS column (Miltenyi Biotec) and analysed by Flow Cytometry. GFP+/PDL1+ cells would not be collected if PD1/PDL1 interaction is neutralized by the tested antibody (1:50).