## **Technical Data Sheet**

# **FITC Mouse Anti-Human CD274**

#### **Product Information**

 Material Number:
 558065

 Alternate Name:
 B7-H1, PD-L1

 Size:
 100 tests

 Vol. per Test:
 20 μl

 Clone:
 MIH1

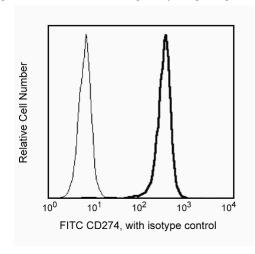
 Isotype:
 Mouse IgG1, κ

Reactivity: QC Testing: Human

**Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

#### Description

PD-L1 and PD-L2 are newly discovered members of the B7 family are the ligands for the program death 1 (PD-1) receptor. They are expressed on immature dendritic cells and mature dendritic cells. PD-L1, also called B7-H1, is expressed on antigen-presenting cells, including IFN-γ-stimulated monocytes, and activated human and murine dendritic cells. Monoclonal antibodies that block PD-L1 and PD-L2 on dendritic cells result in enhanced T cell proliferation and cytokine production. PD-L1 is also expressed on placental trophoblasts, myocardial endothelium, cortical thymic epithelial cells, and on most carcinomas. Studies show overlapping functions of PD-L1 and PD-L2 and indicate an important role for the PD-L:PD-1 pathway in regulating T cell responses.



Profile of anti-PD-L1 (clone MIH1) reactivity on MIT76 transfected cells analyzed by flow cytometry.

### **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

#### **Application Notes**

Application		
	Flow cytometry	Routinely Tested

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
555748	FITC Mouse IgG1, K Isotype Control	100 tests	MOPC-21

#### **BD Biosciences**

www.bdbiosciences.com

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#### **Product Notices**

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-μl experimental sample (a test).
- 2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

#### References

Bennett F, Luxenberg D, Ling V, et al. Program death-1 engagement upon TCR activation has distinct effects on costimulation and cytokine-driven proliferation: attenuation of ICOS, IL-4 and IL-21, but not CD28, IL-7, and IL-15 responses. *J Immunol.* 2003; 170:711-718.(Biology)

Brown JA, Dorfman DM, Ma FR, et al. Blockade of programmed death-1 ligand on dendritic cells enhances T cell activation and cytokine production. *J Immunol.* 2003; 170:1257-1266.(Biology)

Carter L, Fouser LA, Jussif J, et al. PD-1:PD-L inhibitory pathway affects both CD4(+) and CD8(+) T cells and is overcome by IL-2. Eur J Immunol. 2002; 32:634-643.(Biology)

Freeman GJ, Long AJ, Iwai Y, et al. Engagement of PD-1 immunoinhibitory receptor by a novel B7 family member leads to negative regulation of lymphocyte activation. *J Exp Med.* 2000; 192:1027-1034.(Biology)

Latchman Y, Wood CR, Chernova T, et al. PD-L2 is a second ligand for PD-1 and inhibits T cell activation. Nat Immunol. 2001; 2(3):261-268.(Biology)

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