Technical Data Sheet

PE Rat Anti-Mouse CD83

Product Information

558205 **Material Number:** 0.1 mg Size: 0.2 mg/ml **Concentration:** Michel-19 Clone:

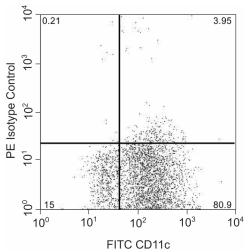
Mouse CD83 Recombinant Protein Immunogen:

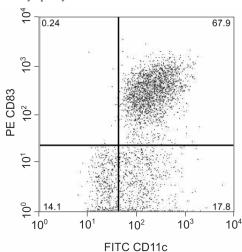
Rat IgG1, κ Isotype: QC Testing: Mouse Reactivity:

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

Description

The Michel-19 antibody reacts with CD83, a member of the immunoglobulin superfamily that is expressed on mature dendritic cells and activated T lymphocytes. Furthermore, thymic cortical epithelial cells express Cd83 transcripts. CD83 is involved in the regulation of T-cell development and immune responses, and its ligand is found on a subpopulation of splenic B lymphocytes.





Analysis of CD83 expression by mature dendritic cells (DC). C57BL/6 bone marrow-derived DC were cultured for 6 days with recombinant mouse GM-CSF (Cat. no. 554586), stimulated for 24 hours with lipopolysaccharide, then stained with FITC Hamster anti-Mouse CD11c mAb HL3 (Cat. no. 557400) and either PE Rat IgG1, κ isotype control mAb R3-34 (Cat. no. 553925, left panel) or PE mAb Michel-19 (right panel). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were 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	
553925	PE Rat IgG1, κ Isotype Control	0.1 mg	R3-34	
557400	FITC Hamster Anti-Mouse CD11c	0.1 mg	HL3	
554586	Recombinant Mouse GM-CSF	10 μg	(none)	

Product Notices

Since applications vary, each investigator should titrate the reagent to obtain optimal results.

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- 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.
- 3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Berchtold S, Muhl-Zurbes P, Heufler C, Winklehner P, Schuler G, Steinkasserer A. Cloning, recombinant expression and biochemical characterization of the murine CD83 molecule which is specifically upregulated during dendritic cell maturation. FEBS Lett. 1999; 461:211-216. (Biology)

Cramer SO, Trumpfheller C, Mehlhoop U, More S, Fleischer B, von Bonin A. Activation-induced expression of murine CD83 on T cells and identification of a specific CD83 ligand on murine B cells. *Int Immunol.* 2000; 12(9):1347-1351. (Biology)

Fujimoto Y, Tu L, Miller AS, Bock C, Fujimoto M, Doyle C, Steeber DA, Tedder TF. CD83 expression influences CD4+ T cell development in the thymus. Cell. 2002; 108:755-767. (Biology)

Wolenski M, Cramer SO, Ehrlich S, Steeg C, Fleischer B, von Bonin A. Enhanced activation of CD83-positive T cells. *Scand J Immunol.* 2003; 58:306-311. (Biology)

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