Product Data Sheet

Purified anti-mouse CD86

Catalog # / Size: 1125510 / 500 μg

Clone: PO3

Isotype: Rat IgG2b, κ

Immunogen: BALB/c mouse B leukemia cell line BCL1

Reactivity: Mouse

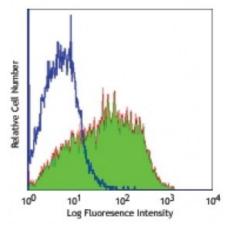
Preparation: The antibody was purified by affinity

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



LPS-stimulated (2 days) C57BL/6 mouse splenocytes stained with purified PO3, followed by anti-rat IgG FITC

Applications:

Applications: Other

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of

this reagent is ≤ 1.0 microg per 10^6 cells in 100 microL volume. It is

recommended that the reagent be titrated for optimal performance for each

application.

Application

Notes:

Additional reported applications (for the relevant formats) include: *in vivo* and *in vitro* blocking 1,4,5 of autoantibody production and T cell activation, stimulation of B cell activity3, immunoprecipitation2, and immunohistochemical staining2 of acetone-fixed frozen sections. The LEAF $^{\text{TM}}$ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 105108).

Application References:

- 1. Nakajima A, et al. 1995. Eur. J. Immunol. 25:3060.
- 2. Nuriya S, et al. 1996. Int. Immunol. 8:917.
- 3. Kasprowicz DJ, et al. 2000. J. Immunol. 165:680.
- 4. Saito K, et al. 1998. J. Immunol. 160:4225.
- 5. Nakajima A, et al. 1998. J. Immunol. 161:1901.
- 6. Ma XT, et al. 2006. Cancer Research 66:1169.
- 7. Lawson BR, et al. 2007. J. Immunol. 178:5366.
- 8. Bhatnagar S and Schorey JS. 2007. *J. Biol. Chem.* doi:10.1074/jbc.M702277200.
- 9. Giroux M, et al. 2007. J. Immunol. 179:4492. PubMed

Description:

CD86 is an 80 kD immunoglobulin superfamily member, also known as B7-2, B70, and Ly-58. CD86 is expressed on activated B and T cells, macrophages, dendritic cells and astrocytes. CD86 along with CD80 are the ligands of CD28 and CD152 (CTLA-4). CD86 is expressed earlier in the immune response than CD80. CD86 has also been shown to be involved in immunoglobulin class-switching and triggering of NK cell-mediated cytotoxicity. CD86 binds to CD28 to transduce costimulatory signals for T cell activation, proliferation, and cytokine production. CD86 can also bind to CD152, also known as CTLA-4, to deliver an inhibitory

signal to T cells. The PO3 antibody has been shown to block autoantibody production *in vivo* and inhibit T cell activation *in vitro*.

Antigen References:

- 1. Barclay A, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.
- 2. Hathcock KS, et al. 1993. Science 262:905.
- 3. Freeman GJ, et al. 1993. Science 262:907.
- 4. Carreno BM, et a