Product Data Sheet

PE anti-mouse CD86

 $\textbf{Catalog \# /} \quad 1125530 \, / \, 200 \; \mu g$

Size: 1125525 / 50 μg

Clone: PO3

Isotype: Rat IgG2b, κ

Immunogen: BALB/c mouse B leukemia cell line

BCL1

Reactivity: Mouse

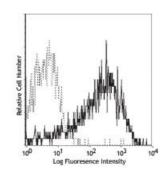
Preparation: The antibody was purified by affinity

chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



LPS-stimulated (3 days) BALB/c splenocytes stained with PO3 PE

Applications:

Applications: Flow Cytometry

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™ 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. 10. Planes R, et al. 2014. J Virol. 88:55672. <u>PubMed</u>

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 co-stimulatory 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