## **Product Data Sheet**

## **APC anti-mouse CD86**

**Catalog # / Size:** 1125565 / 25 μg

 $1125570 / 100 \mu g$ 

Clone: PO3

**Isotype:** Rat IgG2b, κ

Immunogen: BALB/c mouse B leukemia cell line BCL1

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

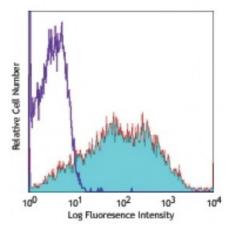
chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



LPS-stimulated (2 days) C57BL/6 mouse splenocytes stained with PO3 APC

## **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  $\leq 0.25$  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<sup>m</sup> purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 105108).

Application References:

- 1. Nakajima A, et al. 1995. Eur. J. Immunol. 25:3060.
- eferences: 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.

**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