## **Product Data Sheet**

## PE/Cy5 anti-mouse CD86

**Catalog # / Size:** 1125080 / 100 μg

1125075 / 25 μg

Clone: GL-2

**Isotype:** Rat IgG2a, κ

Immunogen: LPS-activated CBA/Ca mouse splenic B

cells

Reactivity: Mouse

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

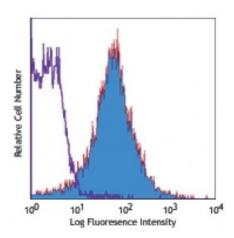
chromatography, and conjugated with PE/Cy5 under optimal conditions. The solution is free of unconjugated PE/Cy5

and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.2



C57BL/6 mouse splenocytes stained with GL-1 PE/Cy5

## **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:

The GL-1 antibody can block the mixed lymphocyte reaction *in vitro* and has been shown to inhibit the priming of cytotoxic T lymphocytes *in vivo* (along with antibodies against B7-1). Additional reported applications (for the relevant formats) include: immunoprecipitation1, immunohistochemical staining of acetone-fixed frozen sections<sup>2,6</sup>, immunofluorescence microscopy, and *in vivo* 

and *in vitro* blocking of T cell responses<sup>1-6</sup>. GL-1 is not suitable for

immunohistochemical staining of formalin-fixed paraffin sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is

recommended for functional assays (Cat. No. 105010).

Application References:

1. Hathcock KS, et al. 1993. Science 262:905. (Block, IP)

2. Inaba KM, et al. 1994. J. Exp. Med. 180:1849. (Block, IHC)

3. Hathcock KS, et al. 1994. J. Exp. Med. 180:631. (Block)

4. Krummel MF, et al. 1995. J. Exp. Med. 182:459. (Block)

5. Liu Y, et al. 1997. J. Exp. Med. 185:251. (Block)

6. Herold KC, et al. 1997. J. Immunol. 158:984. (Block, IHC)

7. Shih FF, et al. 2006. J. Immunol. 176:3438. (FC)

8. Lawson BR, et al. 2007. J. Immunol. 178:5366.

9. Turnquist HR, et al. 2007. J. Immunol. 178:7018.

10. Klinger MB, et al. 2007. Am. J. Physiol. Requl. Integr. Comp. Physiol. 293:R677.

**PubMed** 

11. Shanks K, et al. 2013. Mol Immunol. 56:480. PubMed

12. Soni C, et al. 2014. J Immunol. 193:4400. PubMed

13. Wong EB, et al. 2015. J Immunol. 194:4130. 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, is a ligand 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.

## 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