## **Product Data Sheet**

## PE/Dazzle™ 594 anti-human CD86

Catalog # / Size: 2127165 / 25 tests

2127170 / 100 tests

Clone:

Isotype: Mouse IgG2b, κ

Reactivity: Human

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

chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

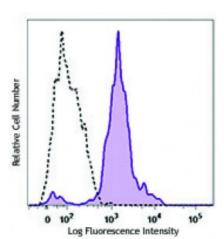
Phosphate-buffered solution, pH 7.2, Formulation:

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: VI CD86.8

Concentration: 0.2



Human peripheral blood monocytes were stained with CD86 (clone IT2.2) PE/Dazzle<sup>™</sup> 594 (filled histogram) or mouse IgG2b, k PE/Dazzle<sup>™</sup> 594 isotype control

(open histogram).

## **Applications:**

Flow Cytometry **Applications:** 

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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**Application** Notes: Additional reported applications (for the relevant formats) include:

immunohistochemical staining of acetone-fixed frozen tissue sections<sup>6</sup>, Western blotting3, and blocking of T cell activation<sup>2,4,5</sup>. The LEAF<sup>™</sup> purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for

functional assays (Cat. No. 305410).

**Application References:**  1. Kishimoto T, et al. Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.

2. Dieu M. 1998. J. Exp. Med. 188:373. (Block) 3. Esser M, et al. 2001. J. Virol. 75:6173. (WB)

4. Jeannin P, et al. 1999. J. Immunol. 162:2044. (Block)

5. Kapsogeorgou EK, et al. 2001. J. Immunol. 166:3107. (Block)

6. Geissmann F, et al. 2001. Blood 97:1241. (IHC)

**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,

monocytes/macrophages, dendritic cells, and astrocytes. CD86, along with CD80, is the 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 bind to CD152 as well, also known as CTLA-4, to deliver an inhibitory signal to T cells.

Antigen 1. Hathcock K, et al. 1996. Adv. Immunol. 62:131. References: 2. June C, et al. 1994. Immunol. Today 15:321.