Product Data Sheet

Pacific Blue™ anti-human CD86

Catalog # / Size: 2127090 / 100 µg

2127085 / 25 µg

2127115 / 100 tests

IT2.2 Clone:

Isotype: Mouse IgG2b, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography, and conjugated with Pacific Blue[™] under optimal conditions. The solution is free of unconjugated

Pacific Blue™.

Formulation: test size: Phosphate-buffered solution,

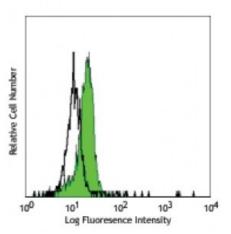
pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA). microg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09%

sodium azide.

Workshop **Number:** VI CD86.8

Concentration: test size: lot-specific; microg sizes: 0.5

mg/ml



Human peripheral blood monocytes stained with IT2.2 Pacific Blue™

Applications:

Applications: Flow Cytometry

Recommended Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis.

For test size, the suggested use of this reagent for immunofluorescent

staining is 5 microL per 10⁶ cells in 100 microL volume.

For microg sizes, the suggested use of this reagent for immunofluorescent

staining is ≤ 0.5 microg per 10^6 cells in 100 microL volume.

It is recommended that the reagent be titrated for optimal performance for each

application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

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

immunohistochemical staining of acetone-fixed frozen tissue sections⁶, Western blotting3, and blocking of T cell activation^{2,4,5}. The LEAF™ 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 References:

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