

**Brilliant Violet 785™ anti-human CD86**

**Catalog # / Size:** 2127205 / 25 tests  
2127210 / 100 tests

**Clone:** IT2.2

**Isotype:** Mouse IgG2b, κ

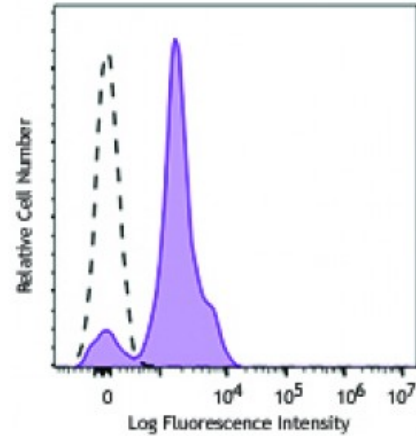
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 785™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 785™ and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

**Workshop Number:** VI CD86.8

**Concentration:** Lot-specific



Human peripheral blood monocytes were stained with CD86 (clone IT2.2) Brilliant Violet 785™ (filled histogram) or mouse IgG2b, κ Brilliant Violet 785™ isotype control (open histogram).

**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 ≤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.

Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 785™ is a trademark of Sirigen Group Ltd.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections<sup>6</sup>, Western blotting<sup>3</sup>, and blocking of T cell activation<sup>2,4,5</sup>. 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.