

**Brilliant Violet 510™ anti-human CD86**

**Catalog # / Size:** 2127160 / 100 tests  
2127155 / 25 tests

**Clone:** IT2.2

**Isotype:** Mouse IgG2b, κ

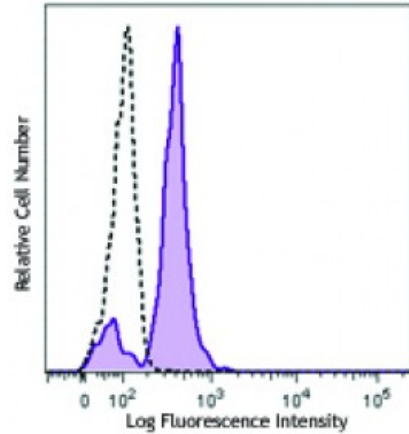
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ 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 510™ (filled histogram) or mouse IgG2b, κ Brilliant Violet 510™ 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 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**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.