

# Product Data Sheet

## LEAF™ Purified anti-human CD86

**Catalog # / Size:** 305409 / 50 µg  
305410 / 500 µg

**Clone:** IT2.2

**Isotype:** Mouse IgG2b, κ

**Workshop Number:** VI CD86.8

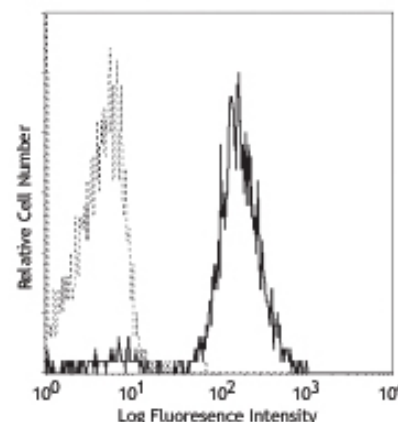
**Reactivity:** Human, **Cross-Reactivity:** Baboon, Capuchin Monkey, Common Marmoset, Cotton-topped Tamarin, Chimpanzee, Cynomolgus, Rhesus

**Preparation:** The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

**Formulation:** 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

**Concentration:** 1.0 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Human peripheral blood monocytes stained with IT2.2 PE

## Applications:

**Applications:** FC - *Quality tested*  
Block, IHC, WB - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections, 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 also bind to CD152, 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.

### Related Products:

**Product**  
 LEAF™ Purified anti-human CD80  
 LEAF™ Purified anti-human CD28  
 LEAF™ Purified Mouse IgG2b, κ Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)  
 Purified anti-human CD275 (B7-H2, ICOSL)

**Clone**  
 2D10  
 CD28.2  
 MPC-11

2D3

### Application

Block, FC, IHC, IP, WB  
 Activ, Costim, FC, IHC, IP,  
 FC, ICFC, WB, IP, ICC, IF, FA  
 FC, ICC, ICFC  
 FC, ICFC  
 FC, IP, ELISA



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