

## PE/Fire™ 810 anti-human CD86 Antibody

<b>Catalog# / Size</b>	305455 / 25 tests
<b>Clone</b>	IT2.2
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	VI CD86.8
<b>Other Names</b>	B7-2, B70
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	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.

### Product Details

<b>Reactivity</b>	Human, African Green, Baboon, Capuchin Monkey, Common Marmoset, Cotton-topped Tamarin, Chimpanzee, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 810 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.  * PE/Fire™ 810 has a maximum excitation of 488/561 nm and a maximum emission of 810 nm.  Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect PE/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our <a href="#">Fire Dyes</a> page.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	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 Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 305449 & 305450).
<b>Application References</b>	1. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London. 2. Dieu M. 1998. <i>J. Exp. Med.</i> 188:373. (Block) 3. Esser M, <i>et al.</i> 2001. <i>J. Virol.</i> 75:6173. (WB)
<b>(PubMed link indicates BioLegend citation)</b>	

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)

**RRID** AB\_2894560 (BioLegend Cat. No. 305455)

## Antigen Details

<b>Structure</b>	Ig superfamily, single-chain transmembrane glycoprotein, 80 kD
<b>Distribution</b>	Monocytes/macrophages, activated B cells and T cells, dendritic cells
<b>Function</b>	T cell costimulation
<b>Ligand/Receptor</b>	CD28, CD152
<b>Cell Type</b>	B cells, Dendritic cells, Macrophages, Monocytes, T cells, Tregs
<b>Biology Area</b>	Cell Biology, Costimulatory Molecules, Immunology, Neuroscience, Neuroscience Cell Markers
<b>Molecular Family</b>	CD Molecules, Immune Checkpoint Receptors
<b>Antigen References</b>	1. Hathcock K, <i>et al.</i> 1996. <i>Adv. Immunol.</i> 62:131. 2. June C, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:321.
<b>Gene ID</b>	<a href="#">942</a>

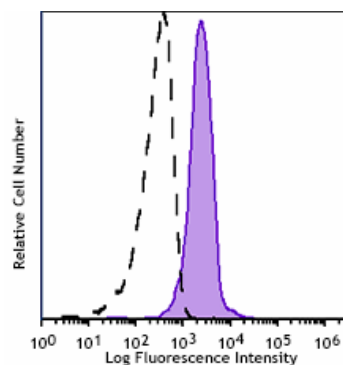
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Biotin anti-human CD86, PE anti-human CD86, PE/Cyanine5 anti-human CD86, Purified anti-human CD86, APC anti-human CD86, Alexa Fluor® 488 anti-human CD86, Alexa Fluor® 647 anti-human CD86, Pacific Blue™ anti-human CD86, PE/Cyanine7 anti-human CD86, PerCP/Cyanine5.5 anti-human CD86, Brilliant Violet 421™ anti-human CD86, Brilliant Violet 650™ anti-human CD86, Brilliant Violet 605™ anti-human CD86, Brilliant Violet 510™ anti-human CD86, PE/Dazzle™ 594 anti-human CD86, Purified anti-human CD86 (Maxpar® Ready), Brilliant Violet 711™ anti-human CD86, Brilliant Violet 785™ anti-human CD86, TotalSeq™-A0006 anti-human CD86, TotalSeq™-B0006 anti-human CD86, TotalSeq™-C0006 anti-human CD86, Ultra-LEAF™ Purified anti-human CD86, KIRAVIA Blue 520™ anti-human CD86, TotalSeq™-D0006 anti-human CD86, PE/Fire™ 810 anti-human CD86

## Product Data



Human peripheral monocytes were stained with CD86 (clone IT2.2) PE/Fire™ 810 (filled histogram) or left unstained (open histogram).

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