

## APC anti-human CD86 Antibody

<b>Catalog# / Size</b>	305411 / 25 tests 305412 / 100 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, $\kappa$
<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

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<b>Verified Reactivity</b>	Human, Cynomolgus, Rhesus
<b>Reported Reactivity</b>	African Green, Baboon, Capuchin Monkey, Common Marmoset, Cotton-topped Tamarin, Chimpanzee
<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 APC 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 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Red Laser (633 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/ $\mu$ g, Azide-Free, 0.2 $\mu$ m filtered) is recommended for functional assays (Cat. Nos. 305449 & 305450).
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.</li> <li>2. Dieu M. 1998. <i>J. Exp. Med.</i> 188:373. (Block)</li> <li>3. Esser M, <i>et al.</i> 2001. <i>J. Virol.</i> 75:6173. (WB)</li> <li>4. Jeannin P, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:2044. (Block)</li> <li>5. Kapsogeorgou EK, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3107. (Block)</li> <li>6. Geissmann F, <i>et al.</i> 2001. <i>Blood</i> 97:1241. (IHC)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

### Product Citations

1. Hazeldine J, *et al.* 2017. PLoS Med. 10.1371/journal.pmed.1002338. [PubMed](#)
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14. Hu X, *et al.* 2016. PLoS One. 11: 0152368. [PubMed](#)
15. Kotsiou E, *et al.* 2016. Blood. 128: 72 - 81. [PubMed](#)
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**RRID** AB\_493232 (BioLegend Cat. No. 305411)  
 AB\_493231 (BioLegend Cat. No. 305412)

## Antigen Details

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<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

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[Cell Surface Flow Cytometry Staining Protocol](#)

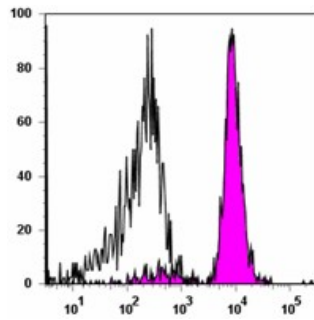
## Other Formats

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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, PE/Fire™ 640 anti-human CD86

## Product Data

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Human peripheral blood monocytes  
stained with IT2.2 APC

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