

## PE/Cyanine7 anti-human CD86 Antibody

<b>Catalog# / Size</b>	305421 / 25 tests 305422 / 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, 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

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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 PE/Cyanine7 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.
<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>Additional Product Notes</b>	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact <a href="#">Technical Service</a> if you have any questions.
<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)

## Product Citations

1. Macal M, *et al.* 2016. *J Immunol.* 196: 1900 - 1909. [PubMed](#)
2. Mester B, *et al.* 2015. *PLoS One.* 10: e0140432. [PubMed](#)
3. Amaladoss A, *et al.* 2015. *PLoS One.* 10:129825. [PubMed](#)
4. Škrnjug I, *et al.* 2014. *PLoS One.* 9:110150. [PubMed](#)
5. Cui L, *et al.* 2021. *Am J Reprod Immunol.* 86:e13436. [PubMed](#)
6. Shevyrev D, *et al.* 2021. *Exp Ther Med.* 209:21. [PubMed](#)
7. Souriant S, *et al.* 2019. *Cell Rep.* 26:3586. [PubMed](#)
8. Liang Y, *et al.* 2019. *J Allergy Clin Immunol.* 144:1025. [PubMed](#)
9. Zhang W, *et al.* 2019. *Mar Drugs.* 0.754166667. [PubMed](#)
10. Lu J, *et al.* 2021. *Front Immunol.* 12:732612. [PubMed](#)
11. Webb K *et al.* 2018. *Frontiers in immunology.* 2.574305556 . [PubMed](#)
12. Zhang Z, *et al.* 2022. *Clin Transl Med.* 12:e1072. [PubMed](#)
13. Huizinga R, *et al.* 2013. *J Immunol.* 191:5636. [PubMed](#)
14. Georgouli M *et al.* 2019. *Cell.* 176(4):757-774 . [PubMed](#)
15. Vidard L, *et al.* 2019. *J Immunol.* 203:676. [PubMed](#)

## RRID

AB\_2275754 (BioLegend Cat. No. 305421)  
 AB\_2074981 (BioLegend Cat. No. 305422)

## 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

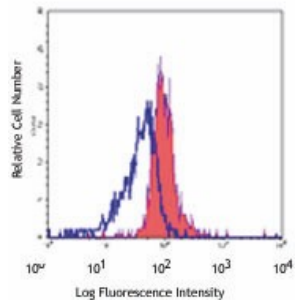
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Biotin anti-human CD86, PE anti-human CD86, PE/Cyanine5 anti-human CD86, Purified anti-human CD86, APC anti-human CD86, Alexa Fluor® 488 anti-human CD86, Alexa Fluor® 647 anti-human CD86, Pacific Blue™ anti-human CD86, PE/Cyanine7 anti-human CD86, 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 PE/Cyanine7



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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587