

## PE/Cyanine7 anti-human IL-6 Antibody

<b>Catalog# / Size</b>	501119 / 25 tests 501120 / 100 tests
<b>Clone</b>	MQ2-13A5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interleukin-6, B cell stimulating factor-2 (BSF-2), Cytotoxic T cell differentiation factor (CDF), Hepatocyte stimulating factor (HSF), Hybridoma/plasmacytoma growth factor (HPGF)
<b>Isotype</b>	Rat IgG1, κ
<b>Description</b>	IL-6 is a potent lymphoid cell growth factor that stimulates the growth and survival of certain B cells and T cells. IL-6 plays a role in host defense, acute phase reactions, immune response, and hematopoiesis. IL-6 is expressed by T cells, B cells, monocytes, fibroblasts, hepatocytes, endothelial cells, and keratinocytes.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	COS-7- expressed, recombinant human IL-6
<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="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular 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>	<p><b>ELISA or ELISPOT Capture</b><sup>1-3,7</sup>: The purified MQ2-13A5 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated MQ2-39C3 antibody (Cat. No. 501202) as the detecting antibody.</p> <p><b>Neutralization</b><sup>1-3,5,6</sup>: The Ultra-LEAF™ purified antibody (Endotoxin &lt;0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of human IL-6 bioactivity (Cat. No. 501110). The MQ2-13A5 antibody can neutralize the bioactivity of natural or recombinant IL-6.</p> <p><b>Additional applications (for the relevant formats) include:</b> intracellular flow cytometry<sup>10</sup>.</p>
<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>	<ol style="list-style-type: none"> <li>1. Abrams J, <i>et al.</i> 1992. <i>Immunol. Rev.</i> 127:5.</li> <li>2. Abrams JS. 2001. <i>Curr. Protoc. Immunol.</i> Unit 6.20.</li> <li>3. Gaines Das R, <i>et al.</i> 1993. <i>J. Immunol. Methods</i> 160:147.</li> <li>4. Enriquez J, <i>et al.</i> 2002. <i>Adv. Perit Dial.</i> 18:177.</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

5. Zou JP, *et al.* 1999. *J. Immunol.* 162:4882.
6. Wyant TL, *et al.* 1999. *Infect. Immun.* 67:1338.
7. Lesmeister MJ, *et al.* 2005. *Reprod. Biol. Endocrinol.* 3:74.
8. Terasaka Y, *et al.* 2010. *Invest. Ophthalmol. Vis. Sci.* 51:2441 [PubMed](#)
9. Girndt M, *et al.* 1998. *J. Am. Soc. Nephrol.* 9:1689.

#### Product Citations

1. Khoonrit P, *et al.* 2020. *PLoS One.* 15:e0238509. [PubMed](#)
2. Fitzgerald KC, *et al.* 2021. *Cell Rep Med.* 2:100424. [PubMed](#)
3. Zhang JA, *et al.* 2020. *Front Immunol.* 11:518. [PubMed](#)

#### RRID

AB\_2572041 (BioLegend Cat. No. 501119)  
 AB\_2572042 (BioLegend Cat. No. 501120)

## Antigen Details

<b>Structure</b>	Neuropoietic cytokine family; 26 kD (Mammalian)
<b>Bioactivity</b>	Hematopoiesis; antigen-specific immune responses, inflammatory reactions; acute phase reaction
<b>Cell Sources</b>	T cells, B cells, macrophages, bone marrow stromal cells, fibroblasts, keratinocytes, mesangium, astrocytes, endothelial cells
<b>Cell Targets</b>	T cells, B cells, hepatocytes, cholinergic neurons
<b>Receptors</b>	Heterodimer IL-6R $\alpha$ (CD126)/IL-6R $\beta$ (CD130; gp130)
<b>Biology Area</b>	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Fitzgerald, K., <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook</i>. Academic Press, San Diego.</li> <li>2. Hirano T. 1998. <i>Int. Rev. Immunol.</i> 16:249.</li> <li>3. Patterson P. 1992. <i>Curr. Opin. Neurobiol.</i> 2:94.</li> <li>4. van Oers M, <i>et al.</i> 1993. <i>Ann. Hematol.</i> 66:219.</li> </ol>
<b>Regulation</b>	Upregulated by IL-1, TNF, PDGF, IFN- $\beta$ , TNF- $\alpha$ , NGF, and IL-17; downregulated by glucocorticoids IL-4 and TGF- $\beta$
<b>Gene ID</b>	<a href="#">3569</a>

## Related Protocols

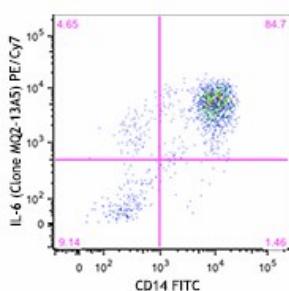
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

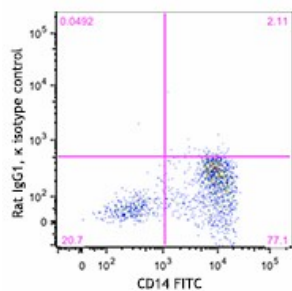
## Other Formats

FITC anti-human IL-6, PE anti-human IL-6, Purified anti-human IL-6, APC anti-human IL-6, Pacific Blue™ anti-human IL-6, Purified anti-human IL-6 (Maxpar® Ready), PerCP/Cyanine5.5 anti-human IL-6, PE/Cyanine7 anti-human IL-6, Alexa Fluor® 647 anti-human IL-6, PE/Dazzle™ 594 anti-human IL-6, Ultra-LEAF™ Purified anti-human IL-6

## Product Data



LPS-stimulated human peripheral blood mononuclear cells (6 hours) were surface stained with CD14 FITC (HCD14) then intracellularly stained with anti-human IL-6 (clone MQ2-13A5) PE/Cyanine7 (top) or rat IgG1,  $\kappa$  PE/Cyanine7 isotype control (bottom). Data shown was from gated monocyte population.



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