

## PE anti-human IL-6 Antibody

<b>Catalog# / Size</b>	501106 / 25 tests 501107 / 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, $\kappa$
<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 under optimal conditions.
<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 $\mu$ 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>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	<p><b>ELISA or ELISPOT Capture<sup>1-3,7</sup>:</b> 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<sup>1-3,5,6</sup>:</b> The Ultra-LEAF™ purified antibody (Endotoxin &lt;0.1 EU/<math>\mu</math>g, Azide-Free, 0.2 <math>\mu</math>m 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>Application References</b>	<p><b>(PubMed link indicates BioLegend citation)</b></p> <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> <li>5. Zou JP, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:4882.</li> <li>6. Wyant TL, <i>et al.</i> 1999. <i>Infect. Immun.</i> 67:1338.</li> <li>7. Lesmeister MJ, <i>et al.</i> 2005. <i>Reprod. Biol. Endocrinol.</i> 3:74.</li> <li>8. Terasaka Y, <i>et al.</i> 2010. <i>Invest. Ophthalmol. Vis. Sci.</i> 51:2441 <a href="#">PubMed</a></li> <li>9. Girndt M, <i>et al.</i> 1998. <i>J. Am. Soc. Nephrol.</i> 9:1689.</li> </ol>

### Product Citations

1. Zhang B, *et al.* 2022. *J Exp Med.* 219: PubMed
2. Iwabuchi R, *et al.* 2021. *Frontiers in Immunology.* 12:643040. PubMed
3. Rice TF, *et al.* 2021. *EBioMedicine.* 72:103612. PubMed
4. de Jonge K, *et al.* 2021. *OncolImmunology.* 10(1):1873585. PubMed
5. Shuwa HA, *et al.* 2021. *Med.* 2(6):720-735.e4. PubMed
6. Zhang H, *et al.* 2011. *Proc Natl Acad Sci U S A.* 108:13456. PubMed

**RRID** AB\_315154 (BioLegend Cat. No. 501106)  
 AB\_315155 (BioLegend Cat. No. 501107)

## 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

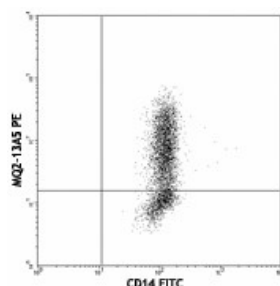
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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 (6 hours) human peripheral blood monocytes were surface stained with CD14 FITC and then intracellularly stained with MQ2-13A5 PE

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