

APC anti-human IL-6 Antibody

Catalog# / Size	501112 / 100 tests
Clone	MQ2-13A5
Regulatory Status	RUO
Other Names	Interleukin-6, B cell stimulating factor-2 (BSF-2), Cytotoxic T cell differentiation factor (CDF), Hepatocyte stimulating factor (HSF), Hybridoma/plasmacytoma growth factor (HPGF)
Isotype	Rat IgG1, κ
Description	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

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	COS-7- expressed, recombinant human IL-6
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Red Laser (633 nm)
Application Notes	<p>ELISA or ELISPOT Capture^{1-3,7}: 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>Neutralization^{1-3,5,6}: The Ultra-LEAF™ purified antibody (Endotoxin <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>Additional applications (for the relevant formats) include: intracellular flow cytometry¹⁰.</p>

Application References

1. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5.
2. Abrams JS. 2001. *Curr. Protoc. Immunol.* Unit 6.20.
3. Gaines Das R, *et al.* 1993. *J. Immunol. Methods* 160:147.
4. Enriquez J, *et al.* 2002. *Adv. Perit Dial.* 18:177.
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. Baguma R, *et al.* 2017. PLoS One. 10.1371/journal.pone.0184563. [PubMed](#)
2. Santos R, *et al.* 2017. Stem Cell Reports. 1.553472222. [PubMed](#)
3. Rizzo MD, *et al.* 2019. J Neuroimmunol. 333:576969. [PubMed](#)
4. Vivas-García Y, *et al.* 2020. Molecular Cell. 77(1):120-137.e9.. [PubMed](#)
5. Saraiva DP, *et al.* 2018. Front Immunol. 2.184027778. [PubMed](#)
6. Rizzo MD, *et al.* 2019. J Pharmacol Exp Ther. 371:191. [PubMed](#)
7. Biasin M, *et al.* 2010. J Immunol. 184:2710. [PubMed](#)
8. Piconi S, *et al.* 2011. Blood. 118:3263. [PubMed](#)
9. Shey M, *et al.* 2014. J Immunol. 192:4833. [PubMed](#)
10. Ciarlo E, *et al.* 2016. Sci Rep. 6:37944. [PubMed](#)

RRID

AB_389222 (BioLegend Cat. No. 501112)

Antigen Details

Structure	Neuropoietic cytokine family; 26 kD (Mammalian)
Bioactivity	Hematopoiesis; antigen-specific immune responses, inflammatory reactions; acute phase reaction
Cell Sources	T cells, B cells, macrophages, bone marrow stromal cells, fibroblasts, keratinocytes, mesangium, astrocytes, endothelial cells
Cell Targets	T cells, B cells, hepatocytes, cholinergic neurons
Receptors	Heterodimer IL-6R α (CD126)/IL-6R β (CD130; gp130)
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none">1. Fitzgerald, K., <i>et al.</i> Eds. 2001. The Cytokine FactsBook. Academic Press, San Diego.2. Hirano T. 1998. <i>Int. Rev. Immunol.</i> 16:249.3. Patterson P. 1992. <i>Curr. Opin. Neurobiol.</i> 2:94.4. van Oers M, <i>et al.</i> 1993. <i>Ann. Hematol.</i> 66:219.
Regulation	Upregulated by IL-1, TNF, PDGF, IFN- β , TNF- α , NGF, and IL-17; downregulated by glucocorticoids IL-4 and TGF- β
Gene ID	3569

Related Protocols

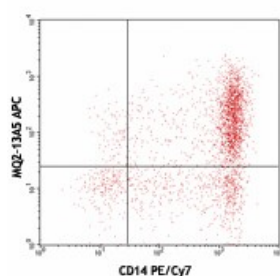
[Intracellular Cytokine Staining Protocol - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

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, APC anti-human IL-6, Pacific Blue™ anti-human IL-6, Purified anti-human IL-6 (Maxpar® Ready), FITC anti-human IL-6, PE anti-human IL-6, Purified anti-human IL-6

Product Data



LPS-stimulated (6 hours) human peripheral blood monocytes surface stained with CD14 PE/Cy7 and intracellular stained with MQ2-13A5 APC

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

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