

PE anti-human IL-2 Antibody

Catalog# / Size	500306 / 25 tests 500307 / 100 tests
Clone	MQ1-17H12
Regulatory Status	RUO
Other Names	Interleukin-2, T cell growth factor (TCGF), Eosinophil differentiation factor (EDF), Killer cell helper factor (KHF), Macrophage-activating factor for cytotoxicity I (MAF-C I), Thymocyte differentiation factor (TDF)
Isotype	Rat IgG2a, κ
Description	IL-2 is a potent lymphoid cell growth factor which exerts its biological activity primarily on T cells, promoting proliferation and maturation. Additionally, IL-2 has been found to stimulate growth and differentiation of B cells, NK cells, LAK cells, monocytes, and oligodendrocytes.

Product Details

Verified Reactivity	Human
Reported Reactivity	Cat, Chimpanzee, Baboon, Cynomolgus, Rhesus, Sooty Mangabey
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	<i>E. coli</i> - expressed recombinant human IL-2
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 PE under optimal conditions.
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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	<p>ELISA or ELISPOT Capture^{2,3}: The purified MQ1-17H12 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the Biotin anti-human IL-2 antibody (Cat. No. 517605) as the detecting antibody. The Ultra-LEAF™ purified antibody is suggested for ELISPOT capture. For ELISPOT capture applications, a concentration range of 4.0 - 8.0 µg/mL is recommended.</p> <p>Additional reported applications (for the relevant formats) include: immunoprecipitation², immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections^{1,4-6,8}, neutralization¹³, and immunocytochemistry.</p> <p>Note: For testing human IL-2 in serum or plasma, BioLegend's LEGEND MAX™ Kit (Cat. No. 431807) is specially developed and recommended.</p> <p>Clone MQ1-17H12 cross-reacts to Cat¹⁵</p>
Application References	<ol style="list-style-type: none"> Andersson J, <i>et al.</i> 1994. <i>Immunology</i> 83:16. (IHC) Abrams J, <i>et al.</i> 1992. <i>Immunol. Rev.</i> 127:5. (IP) Abrams JS. 1995. <i>Curr. Prot. Immunol.</i> Unit 6.20. Fernandez V, <i>et al.</i> 1994. <i>Eur. J. Immunol.</i> 24:1808. (IHC) Skansen-Saphir U, <i>et al.</i> 1994. <i>Eur. J. Immunol.</i> 24:916. (IHC)
(PubMed link indicates BioLegend citation)	

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Product Citations

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6. Cella M, *et al.* 2019. *Nat Immunol.* 1.513888889. [PubMed](#)
7. Thieme CJ, *et al.* 2020. *Cell Rep Med.* 1:100092. [PubMed](#)
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13. Fan Z, *et al.* 2020. *EMBO Mol Med.* 12:e11571. [PubMed](#)

RRID

AB_315093 (BioLegend Cat. No. 500306)
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Antigen Details

Structure	Cytokine; 15.4 kD (Mammalian)
Bioactivity	Proliferation of T lymphocytes, B cells, anti-inflammatory, hematopoiesis, tumor surveillance
Cell Sources	T cells
Cell Targets	T cells, B cells, NK cells, LAK cells, monocytes, macrophages, oligodendrocytes
Receptors	High affinity heterotrimer of IL-2R α / β / γ , intermediate affinity homodimer IL-2R α (CD25; p55; Tac) and heterodimer IL-2R β (CD122)/ γ ; γ -subunit (CD132) in common with IL-4R, IL-7R, IL-13R, IL-15R
Cell Type	Tregs
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook</i>. Academic Press, San Diego. 2. Taniguchi T, <i>et al.</i> 1993. <i>Cell</i> 73:5. 3. Nistico G. 1993. <i>Prog. Neurobiol.</i> 40:463. 4. Waldmann T, <i>et al.</i> 1993. <i>Ann. NY Acad. Sci.</i> 685:603.
Regulation	Upregulated by NFAT; downregulated by TCF-8 and CIF (colostrums inhibitory factor)
Gene ID	3558

Related Protocols

[Intracellular Cytokine Staining Protocol - Video](#)

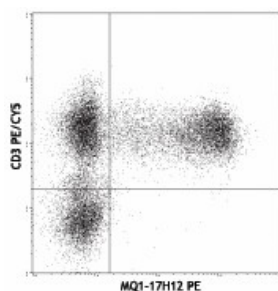
[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human IL-2, FITC anti-human IL-2, PE anti-human IL-2, Purified anti-human IL-2, Alexa Fluor® 488 anti-human IL-2, Alexa

Fluor® 647 anti-human IL-2, Alexa Fluor® 700 anti-human IL-2, PerCP/Cyanine5.5 anti-human IL-2, Pacific Blue™ anti-human IL-2, PE/Cyanine7 anti-human IL-2, Brilliant Violet 421™ anti-human IL-2, Brilliant Violet 605™ anti-human IL-2, Brilliant Violet 650™ anti-human IL-2, Brilliant Violet 510™ anti-human IL-2, Brilliant Violet 711™ anti-human IL-2, APC/Cyanine7 anti-human IL-2, Purified anti-human IL-2 (Maxpar® Ready), PE/Dazzle™ 594 anti-human IL-2, Brilliant Violet 785™ anti-human IL-2, PerCP anti-human IL-2, APC/Fire™ 750 anti-human IL-2, Ultra-LEAF™ Purified anti-human IL-2

Product Data



PMA/Ionomycin-stimulated human PBMCs were stained with CD3 PE/Cy5 and MQ1-17H12 PE

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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