

PE anti-human IL-2 Antibody

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| 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

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| 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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RRID

AB_315093 (BioLegend Cat. No. 500306)
 AB_315094 (BioLegend Cat. No. 500307)

Antigen Details

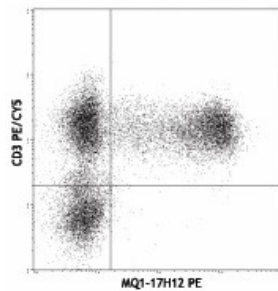
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|---------------------------|--|
| Structure | Cytokine; 15.4 kD (Mammalian) |
| Bioactivity | Proliferation of T lymphocytes, B cells, anti-inflammatory, hematopoiesis, tumor surveillance |
| Cell Sources | T cells |
| Cell Targets | T cells, B cells, 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

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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