

GMP PE anti-human CD25 Antibody

Catalog# / Size	260214 / 100 tests
Clone	M-A251
Workshop	IV A053
Other Names	IL-2 receptor α chain, Low affinity IL-2R, IL-2R α chain
Isotype	Mouse IgG1, κ
Description	CD25 is a 55 kD type I transmembrane glycoprotein also known as low affinity IL-2 receptor α chain or Tac. It is expressed on progenitor lymphocytes, activated T and B cells, and activated monocytes/macrophages. CD25 is also expressed on a subset of non-stimulated CD4 ⁺ T cells termed T regulatory cells. Soluble CD25/IL-2R α is produced as a consequence of lymphocyte stimulation and is found in biological fluids following inflammatory responses. CD25 associates with IL-2 receptor β (CD122) and common γ (CD132) chains to form a high affinity IL-2R complex.

Product Details

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human PHA-induced lymphocyte cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) and a stabilizer.
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	100 μ g/mL
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	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by 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. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde fixed frozen sections ¹ and spatial biology (IBEX) ^{2,3} . The CD25 molecule reveals three epitope regions: A, B, and C. M-A251 antibody recognizes epitope region B. Unlike other CD25 antibody clones, M-A251 can detect CD25 after fixation with paraformaldehyde.
Application References	1. Li H and Pauza CD. 2015. <i>Eur. J. Immunol.</i> 45:298. (IHC) 2. Radtke AJ, et al. 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed 3. Radtke AJ, et al. 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
(PubMed link indicates BioLegend citation)	
Disclaimer	GMP RUO Flow Cytometry Antibodies. BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include: <ul style="list-style-type: none"> • Batch-to-batch consistency

- Material traceability
- Documented procedures
- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

Antigen Details

Structure	Type I transmembrane glycoprotein, 55 kD; low-affinity IL-2 receptor α chain
Distribution	Activated T and B cells, monocytes/macrophages, Tregs
Interaction	Associates with IL-2R β /CD122 and IL-2R γ /CD132 receptor chains to form a high-affinity IL-2R complex
Ligand/Receptor	IL-2
Cell Type	B cells, Macrophages, Monocytes, T cells, Tregs
Biology Area	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	<ol style="list-style-type: none"> 1. Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press. 2. Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. 3. Barclay N, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook. Academic Press Inc. 4. Taniguchi T and Minami Y. <i>et al.</i> 1993. <i>Cell</i> 73:5. 5. Waldmann T. 1991. <i>J. Biol. Chem.</i> 266:2681.
Gene ID	3559

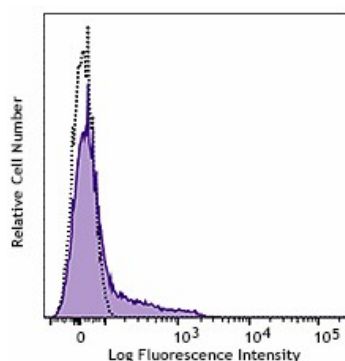
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC/Cyanine7 anti-human CD25, Purified anti-human CD25, PE anti-human CD25, FITC anti-human CD25, PE/Cyanine7 anti-human CD25, APC anti-human CD25, PerCP/Cyanine5.5 anti-human CD25, Brilliant Violet 421™ anti-human CD25, Alexa Fluor® 488 anti-human CD25, Alexa Fluor® 700 anti-human CD25, Brilliant Violet 510™ anti-human CD25, PE/Dazzle™ 594 anti-human CD25, Biotin anti-human CD25, Alexa Fluor® 647 anti-human CD25, Pacific Blue™ anti-human CD25, PerCP anti-human CD25, APC/Fire™ 750 anti-human CD25, Brilliant Violet 711™ anti-human CD25, Brilliant Violet 785™ anti-human CD25, Brilliant Violet 605™ anti-human CD25, KIRAVIA Blue 520™ anti-human CD25, PE/Fire™ 700 anti-human CD25, APC/Fire™ 810 anti-human CD25, Spark NIR™ 685 anti-human CD25 Antibody, Spark YG™ 581 anti-human CD25, PE/Fire™ 640 anti-human CD25 Antibody, PE/Cyanine5 anti-human CD25

Product Data



Typical results from human peripheral blood lymphocytes stained either with M-A251 PE used at 5 μ L/test (filled histogram) or with an isotype control (open histogram).

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