

## APC/Fire™ 810 anti-human CD25 Antibody

<b>Catalog# / Size</b>	356149 / 25 tests 356150 / 100 tests
<b>Clone</b>	M-A251
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	IV A053
<b>Other Names</b>	IL-2 receptor $\alpha$ chain, Low affinity IL-2R, IL-2R $\alpha$ chain
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD25 is a 55 kD type I transmembrane glycoprotein also known as low affinity IL-2 receptor $\alpha$ 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 <sup>+</sup> T cells termed T regulatory cells. Soluble CD25/IL-2R $\alpha$ is produced as a consequence of lymphocyte stimulation and is found in biological fluids following inflammatory responses. CD25 associates with IL-2 receptor $\beta$ (CD122) and common $\gamma$ (CD132) chains to form a high affinity IL-2R complex.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human PHA-induced lymphocyte cells
<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 APC/Fire™ 810 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">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. It is recommended that the reagent be titrated for optimal performance for each application.  * APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum emission of 810 nm.  Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect APC/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our <a href="#">Fire Dyes</a> page.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde fixed frozen sections <sup>1</sup> and spatial biology (IBEX) <sup>2,3</sup> .  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

(PubMed link indicates BioLegend citation)

1. Li H and Pauza CD. 2015. *Eur. J. Immunol.* 45:298. (IHC)
2. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
3. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

## RRID

AB\_2876679 (BioLegend Cat. No. 356149)  
AB\_2876679 (BioLegend Cat. No. 356150)

## Antigen Details

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

## Gene ID

[3559](#)

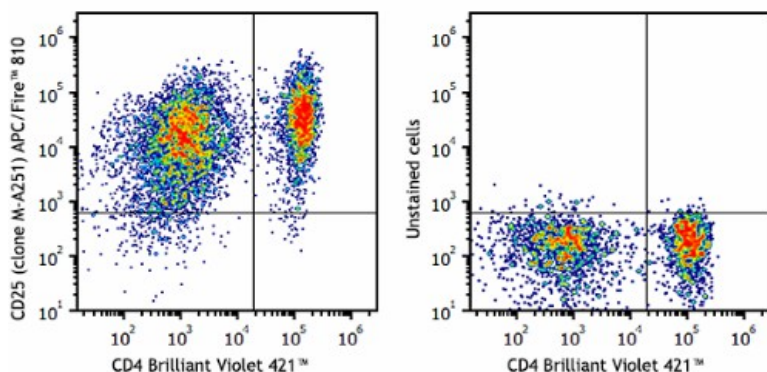
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

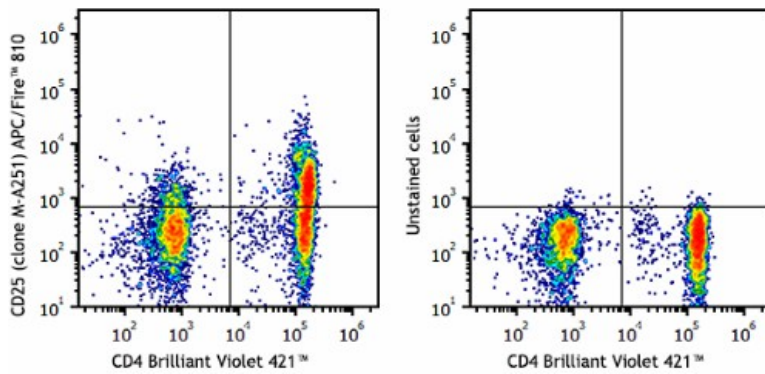
## Other Formats

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, Spark Red™ 718 anti-human CD25, GMP PE anti-human CD25

## Product Data



PHA-stimulated (3 days) human peripheral blood lymphocytes were stained with anti-human CD4 Brilliant Violet 421™ and anti-human CD25 APC/Fire™ 810 (clone M-A251) (left) or stained with CD4 Brilliant Violet 421™ only (right).



Human peripheral blood lymphocytes were stained with CD4 Brilliant Violet 421™ and anti-human CD25 APC/Fire™ 810 (clone M-A251) (left) or stained with CD4 Brilliant Violet 421™ only (right).

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