

Alexa Fluor[®] 488 anti-mouse CD25 Antibody

Catalog# / Size	102018 / 25 µg 102017 / 100 µg
Clone	PC61
Regulatory Status	RUO
Other Names	IL-2R α , Ly-43, p55, Tac
Isotype	Rat IgG1, λ
Description	CD25 is a 55 kD glycoprotein also known as the low affinity IL-2R α , Ly-43, p55, or Tac. It is expressed on activated T and B cells, thymocyte subsets, pre-B cells, and T regulatory cells. In association with CD122 (IL-2R β) and CD132 (common γ chain), CD25 forms the high affinity signaling IL-2 receptor.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	IL-2-dependent cytolytic mouse T-cell clone B6.1
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 488 under optimal conditions.
Concentration	0.5 mg/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	<p>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 ≤ 0.25 µg per 10^6 cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 488 has a maximum emission of 519 nm when it is excited at 488 nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ^{1,2} , <i>in vitro</i> blocking of IL-2 binding to low- and high-affinity receptors ¹⁻⁴ , growth inhibition of IL-2-dependent T-cell lines ¹⁻⁴ , <i>in vivo</i> depletion of CD25 ⁺ CD4 ⁺ Treg cells ^{5-8,10} , and immunohistochemical staining of acetone-fixed frozen sections ² . PC61 antibody recognizes a different epitope than 3C7 antibody (Cat. No. 101902). For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 102040) with endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered.
Application References	<ol style="list-style-type: none"> Lowenthal JW, <i>et al.</i> 1985. <i>Nature</i> 315:669. (IP, Block) Ceredig R, <i>et al.</i> 1985. <i>Nature</i> 314:98. (IP, IHC, Block) Lowenthal JW, <i>et al.</i> 1985. <i>J. Immunol.</i> 135:3988. (Block) Moreau JL, <i>et al.</i> 1987. <i>Eur. J. Immunol.</i> 17:929. (Block) Takahashi T, <i>et al.</i> 2000. <i>J. Exp. Med.</i> 192:303. (Deplete) Onizuka S, <i>et al.</i> 1999. <i>Cancer Res.</i> 59:3128. (Deplete) Lei TC, <i>et al.</i> 2005. <i>Blood</i> 105:4865. (Deplete)

8. Pasare C, *et al.* 2004. *Immunity* 21:733. (Deplete)
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Product Citations

1. Watanabe N, *et al.* 2016. PLoS One. 11: 0150244. [PubMed](#)
2. Delacher M, *et al.* 2021. *Immunity.* 54(4):702-720.e17. [PubMed](#)
3. Wong HS, *et al.* 2021. *Cell.* . [PubMed](#)
4. Yuan M, *et al.* 2017. *Hum Reprod.* 32:94. [PubMed](#)
5. Silva DA, *et al.* 2019. *Nature.* 565:186. [PubMed](#)
6. Galitovskiy V, *et al.* 2011. *J Immunol.* 187:2677. [PubMed](#)

RRID

AB_493334 (BioLegend Cat. No. 102018)
 AB_493333 (BioLegend Cat. No. 102017)

Antigen Details

Structure	Forms high affinity IL-2R with IL-2R β (CD122) and IL-2R γ (CD132), 55 kD
Distribution	Activated T cells and B cells, thymocyte subset, pre-B cells, T regulatory cells
Function	IL-2 receptor
Ligand/Receptor	IL-2
Cell Type	B cells, T cells, Thymocytes, Tregs
Biology Area	Immunology
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	<ol style="list-style-type: none"> 1. Taniguchi T, <i>et al.</i> 1993. <i>Cell</i> 73:5-8. 2. Waldmann TA. 1991. <i>J Biol Chem.</i> 266:2681-4. 3. Read S, <i>et al.</i> 2000. <i>J Exp Med.</i> 192:295-302. 4. Lowenthal JW, <i>et al.</i> 1985. <i>J Immunol.</i> 135:3988-94.

Gene ID

[16184](#)

Related Protocols

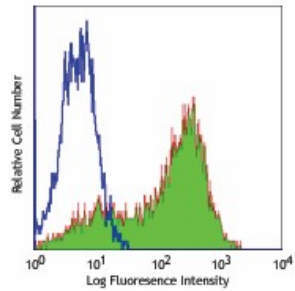
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Dazzle™ 594 anti-mouse CD25, Brilliant Violet 711™ anti-mouse CD25, Brilliant Violet 785™ anti-mouse CD25, Alexa Fluor® 594 anti-mouse CD25, APC/Fire™ 750 anti-mouse CD25, TotalSeq™-A0097 anti-mouse CD25, KIRAVIA Blue 520™ anti-mouse CD25, PE/Cyanine7 anti-mouse CD25, TotalSeq™-B0097 anti-mouse CD25, TotalSeq™-C0097 anti-mouse CD25, Spark NIR™ 685 anti-mouse CD25 Antibody, PE/Fire™ 640 anti-mouse CD25, Spark YG™ 581 anti-mouse CD25, APC/Fire™ 810 anti-mouse CD25, Alexa Fluor® 488 anti-mouse CD25, Alexa Fluor® 647 anti-mouse CD25, Pacific Blue™ anti-mouse CD25, Alexa Fluor® 700 anti-mouse CD25, APC/Cyanine7 anti-mouse CD25, APC anti-mouse CD25, Biotin anti-mouse CD25, FITC anti-mouse CD25, PE anti-mouse CD25, PE/Cyanine5 anti-mouse CD25, Purified anti-mouse CD25, PerCP/Cyanine5.5 anti-mouse CD25, PerCP anti-mouse CD25, Brilliant Violet 421™ anti-mouse CD25, Brilliant Violet 605™ anti-mouse CD25, Brilliant Violet 650™ anti-mouse CD25, UltraLEAF™ Purified anti-mouse CD25, Brilliant Violet 510™ anti-mouse CD25

Product Data

Con A-stimulated (3 days) BALB/c
mouse splenocytes stained with PC61
Alexa Fluor® 488



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