

PE/Cyanine5 anti-mouse CD25 Antibody

Catalog# / Size	102010 / 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 PE/Cyanine5 under optimal conditions.
Concentration	0.2 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	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.
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: 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.
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy5 to PE/Cyanine5. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine5 products. Please contact Technical Service if you have any questions.
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) Pasare C, <i>et al.</i> 2004. <i>Immunity</i> 21:733. (Deplete) León-Ponte M, <i>et al.</i> 2007. <i>Blood</i> 109:3139.
(PubMed link indicates BioLegend citation)	

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11. Benson MJ, *et al.* 2007. *J. Exp. Med.* doi:10.1084/jem.20070719.
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13. Anguela XM, *et al.* 2013. *Diabetes.* 62:551. [PubMed](#)

Product Citations

1. Kim D, *et al.* 2021. *Nanomicro Lett.* 13:31. [PubMed](#)
2. Marangoni F, *et al.* 2021. *Cell.* [PubMed](#)
3. Cippà PE, *et al.* 2012. *Cell Death Dis.* 0.332638889. [PubMed](#)
4. Perrot I *et al.* 2019. *Cell Rep.* 27(8):2411-2425. [PubMed](#)
5. Zongyi Y, *et al.* 2017. *PLoS One.* 10.1371/journal.pone.0189617. [PubMed](#)
6. Gary E, *et al.* 2020. *Vaccine.* 3821:38. [PubMed](#)
7. Zhang C, *et al.* 2021. *J Immunother Cancer.* 9:. [PubMed](#)
8. Wang X, *et al.* 2022. *Elife.* 11:. [PubMed](#)

RRID AB_312859 (BioLegend Cat. No. 102010)

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

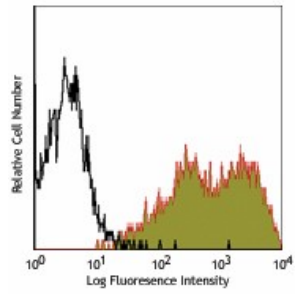
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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, PE/Cyanine7 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, 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, Ultra-LEAF™ Purified anti-mouse CD25, Brilliant Violet 510™ anti-mouse CD25, 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, 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

Product Data

Con A-stimulated (day-3) C57BL/6 mouse splenocytes stained with PC61 PE/Cyanine5



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