

PE/Fire™ 640 anti-mouse CD25 Antibody

Catalog# / Size	102071 / 25 µg 102072 / 100 µg
Clone	PC61
Regulatory Status	RUO
Other Names	IL-2Rα, Ly-43, p55, Tac
Isotype	Rat IgG1, λ
Description	CD25 is a 55 kD glycoprotein also known as the low affinity IL-2Rα, 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-2Rβ) 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/Fire™ 640 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 million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Fire™ 640 has a maximum excitation of 566 nm and a maximum emission of 639 nm.
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.
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. Cao OW, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2007-02-073304. (Deplete)
(PubMed link indicates BioLegend citation)	

11. Benson MJ, *et al.* 2007. *J. Exp. Med.* doi:10.1084/jem.20070719.
12. Liu F, *et al.* 2011. *Arch Toxicol.* 85:1383. [PubMed](#)
13. Anguela XM, *et al.* 2013. *Diabetes.* 62:551. [PubMed](#)

RRID AB_2894645 (BioLegend Cat. No. 102071)
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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

1. Taniguchi T, *et al.* 1993. *Cell* 73:5-8.
2. Waldmann TA. 1991. *J Biol Chem.* 266:2681-4.
3. Read S, *et al.* 2000. *J Exp Med.* 192:295-302.
4. Lowenthal JW, *et al.* 1985. *J Immunol.* 135:3988-94.

Gene ID [16184](#)

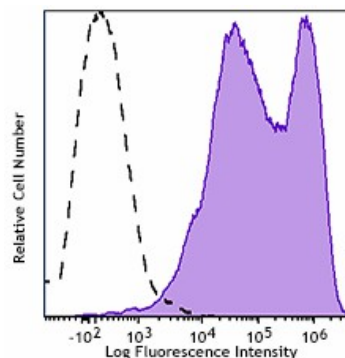
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

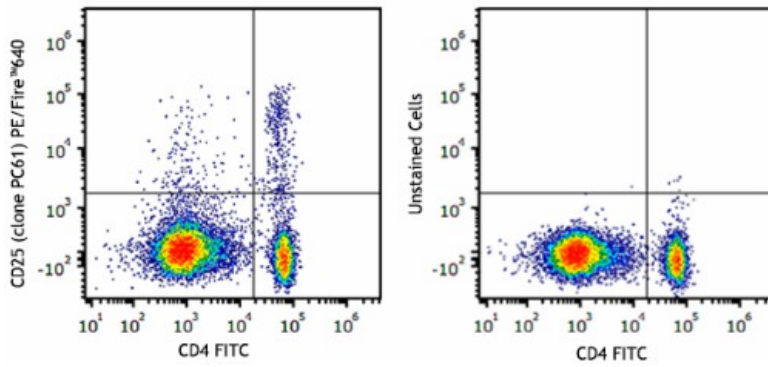
Other Formats

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 (3 days) C57BL/6 mouse splenocytes were stained with anti-mouse CD25 (clone PC61) PE/Fire™ 640 (filled histogram) or were left unstained (open histogram).



C57BL/6 mouse splenocytes were stained with anti-mouse CD4 FITC and anti-mouse CD25 (clone PC61) PE/Fire™ 640 (left) or CD4 FITC only (right).

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