

PE/Fire™ 744 anti-mouse CD25 Antibody

Catalog# / Size	102091 / 25 µg 102092 / 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™ 744 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 ≤ 0.125 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages. * PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 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

(PubMed link indicates
BioLegend citation)

1. Lowenthal JW, *et al.* 1985. *Nature* 315:669. (IP, Block)
2. Ceredig R, *et al.* 1985. *Nature* 314:98. (IP, IHC, Block)
3. Lowenthal JW, *et al.* 1985. *J. Immunol.* 135:3988. (Block)
4. Moreau JL, *et al.* 1987. *Eur. J. Immunol.* 17:929. (Block)
5. Takahashi T, *et al.* 2000. *J. Exp. Med.* 192:303. (Deplete)
6. Onizuka S, *et al.* 1999. *Cancer Res.* 59:3128. (Deplete)
7. Lei TC, *et al.* 2005. *Blood* 105:4865. (Deplete)
8. Pasare C, *et al.* 2004. *Immunity* 21:733. (Deplete)
9. León-Ponte M, *et al.* 2007. *Blood* 109:3139.
10. Cao OW, *et al.* 2007. *Blood* doi:10.1182/blood-2007-02-073304. (Deplete)
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](#)

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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](#)

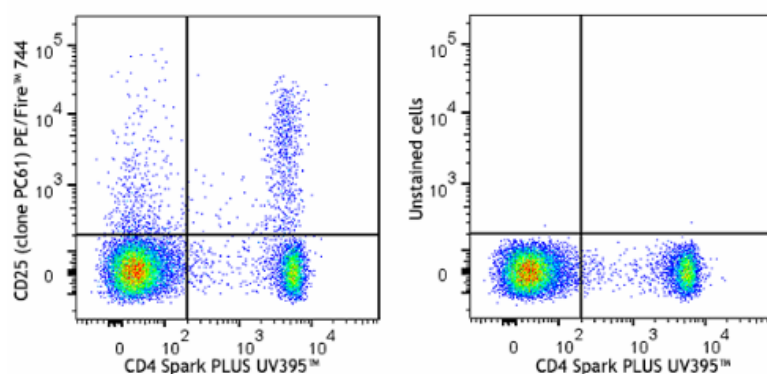
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Fire™ 640 anti-mouse CD25, Spark YG™ 581 anti-mouse CD25, APC/Fire™ 810 anti-mouse CD25, PerCP/Fire™ 780 anti-mouse CD25, PE/Fire™ 700 anti-mouse CD25, PE/Dazzle™ 594 anti-mouse CD25, Alexa Fluor® 594 anti-mouse CD25, APC/Fire™ 750 anti-mouse CD25, Ultra-LEAF™ Purified anti-mouse CD25, Spark PLUS UV395™ anti-mouse CD25, Brilliant Violet 750™ anti-mouse CD25, Spark Blue™ 574 anti-mouse CD25 (Flexi-Fluor™), Spark PLUS B550™ anti-mouse CD25, Spark YG™ 593 anti-mouse CD25 (Flexi-Fluor™) Antibody, Spark UV™ 387 anti-mouse CD25 (Flexi-Fluor™), Alexa Fluor® 488 anti-mouse CD25, Spark PLUS V475™ anti-mouse CD25 Antibody, Brilliant Violet 711™ anti-mouse CD25, Brilliant Violet 785™ anti-mouse CD25, Alexa Fluor® 647 anti-mouse CD25, Alexa Fluor® 700 anti-mouse CD25, APC/Cyanine7 anti-mouse CD25, Biotin anti-mouse CD25, Purified anti-mouse CD25, TotalSeq™-A0097 anti-mouse CD25, TotalSeq™-C0097 anti-mouse CD25, Spark NIR™ 685 anti-mouse CD25 Antibody, Brilliant Violet 510™ anti-mouse CD25, PerCP/Fire™ 806 anti-mouse CD25 Antibody, PE/Fire™ 744 anti-mouse CD25 Antibody, APC anti-mouse CD25, PE/Cyanine7 anti-mouse CD25, TotalSeq™-B0097 anti-mouse CD25, Brilliant Violet 421™ anti-mouse CD25, Brilliant Violet 605™ anti-mouse CD25, Brilliant Violet 650™ anti-mouse CD25, Pacific Blue™ anti-mouse CD25, FITC anti-mouse CD25, PE anti-mouse CD25, PE/Cyanine5 anti-mouse CD25, PerCP/Cyanine5.5 anti-mouse CD25, PerCP anti-mouse CD25, KIRAVIA Blue 520™ anti-mouse CD25

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse CD4 (clone GK1.5) Spark PLUS UV395™ and anti-mouse CD25 (clone PC61) PE/Fire™ 744 (left) or stained with anti-mouse CD4 (clone GK1.5) Spark PLUS UV395™ only (right).

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