CD25 Monoclonal Antibody (PC61.5), PE-Cyanine7, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG1, lambda
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PC61.5
Conjugate	PE-Cyanine7
Excitation/Emission Max	569/780 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469607

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	142 Publications
Functional Assay (FN)	-	2 Publications

Product Specific Information

Description: The PC61.5 antibody reacts with mouse CD25, the 55 kDa interleukin-2 receptor alpha chain (IL-2R alpha). CD25 is expressed by early progenitors of the T and B lineage as well as by activated mature T and B lymphocytes. By itself, CD25 binds IL-2 only with low affinity. However, CD25 associates with CD122 (IL-2 receptor beta chain) and CD132 (common gamma chain) to form the high affinity IL-2 receptor. Binding of IL-2 to both the high and low affinity classes of IL-2 receptor is inhibited by the PC61.5 antibody. CD25 plays a role in lymphocyte differentiation and activation/proliferation.

Applications Reported: The PC61.5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This PC61.5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

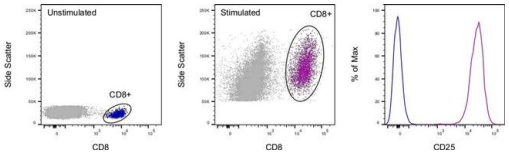
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-822-49) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

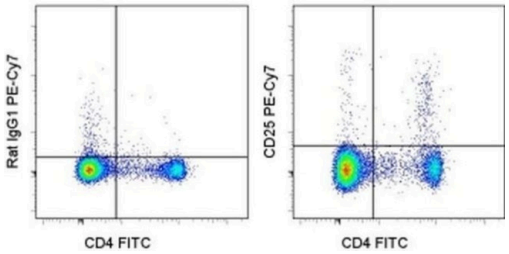
Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD25 Monoclonal Antibody (PC61.5), PE-Cyanine7, eBioscience™



CD25 Antibody (25-0251-81)
Staining of stimulated mouse splenocytes. As expected based on known expression patterns, CD25 clone PC61.5 staining is significantly increased in CD8+ T cells after stimulation. Details: Mouse splenocytes were unstimulated (blue histogram) or stimulated for 2 days with CD3 (clone 145-2C11), CD28 (clone 37.51), and Mouse IL-2 Recombinant Protein (purple histogram). After stimulation, cells were stained with CD8 (clone 53-6.7) and CD25 (clone PC61. 5). Cells in the CD8+ gate were used for analysis. {TM}



CD25 Antibody (25-0251-81) in Flow
Staining of C57Bl/6 splenocytes with Anti-Mouse CD4 FITC (Product # 11-0041-82) and 0.06 µg of Rat IgG1 K Isotype Control PE-Cyanine7 (Product # 25-4301-82) (left) or 0.06 µg of Anti-Mouse CD25 PE-Cyanine7 (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

144 References

Flow Cytometry (142)

Oncoimmunology

A synergistic triad of chemotherapy, immune checkpoint inhibitors, and caloric restriction mimetics eradicates tumors in mice.

"25-0251-82 was used in Flow Cytometry to point to the possibility of synergistic interactions among distinct classes of anticancer agents."

Authors: Lévesque S,Le Naour J,Pietrocola F,Paillet J,Kremer M,Castoldi F,Baracco EE,Wang Y,Vacchelli E,Stoll G,Jolly A,De La Grange P,Zitvogel L,Kroemer G,Pol JG

Year
2023

Species
Mouse

Nature communications

Aiolos represses $CD4^+$ T cell cytotoxic programming via reciprocal regulation of T_{FH} transcription factors and IL-2 sensitivity.

"Published figure using CD25 monoclonal antibody (Product # 25-0251-82) in Flow Cytometry"

Authors: Read KA,Jones DM,Pokhrel S,Hales EDS,Varkey A,Tuazon JA,Eisele CD,Abdouni O,Saadey A,Leonard MR,Warren RT,Powell MD,Boss JM,Hemann EA,Yount JS,Xin G,Ghoneim HE,Lio CJ,Freud AG,Collins PL,Oestreich KJ

Year
2023

View more Flow references on thermofisher.com

Functional Assay (2)

Cancer research

Combination of tumor site-located CTL-associated antigen-4 blockade and systemic regulatory T-cell depletion induces tumor-destructive immune responses.

Authors: Tuve S,Chen BM,Liu Y,Cheng TL,Touré P,Sow PS,Feng Q,Kiviat N,Strauss R,Ni S,Li ZY,Roffler SR,Lieber A

Year
2007

Cancer research

Listeria monocytogenes promotes tumor growth via tumor cell toll-like receptor 2 signaling.

Authors: Huang B,Zhao J,Shen S,Li H,He KL,Shen GX,Mayer L,Unkeless J,Li D,Yuan Y,Zhang GM,Xiong H,Feng ZH

Year
2007

More applications with references on thermofisher.com