

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Rat / IgG1, lambda
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PC61.5
Conjugate	PE
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_465607

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	154 Publications
Functional Assay (FN)	-	3 Publications
Immunofluorescence (IF)	-	1 Publication
Miscellaneous PubMed (Misc)	-	3 Publications
Western Blot (WB)	-	1 Publication

## 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.

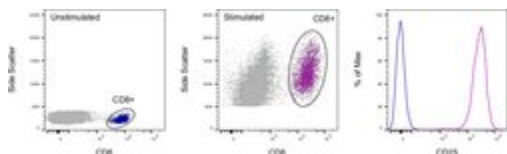
**Applications Reported:** The PC61.5 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** The PC61.5 antibody has been tested by flow cytometric analysis of mouse splenocytes and Con A-stimulated splenocyte culture. 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<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

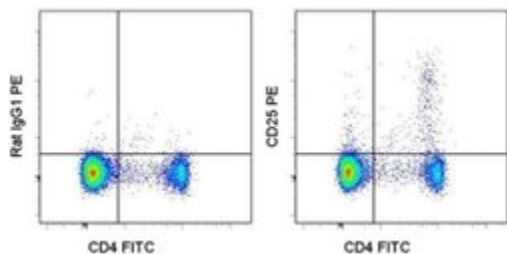
## Advanced Verification Data



### CD25 Antibody (12-0251-82)

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. Cell treatment validation info.

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



### CD25 Antibody (12-0251-82) 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 (Product # 12-4301-82) (left) or 0.06 µg of Anti-Mouse CD25 PE (right). Total viable cells were used for analysis.

## Flow Cytometry (154)

### Clinical and translational allergy

#### The efficacy of oral and subcutaneous antigen-specific immunotherapy in murine cow's milk- and peanut allergy models.

"12-0251 was used in Flow cytometry/Cell sorting to compare oral immunotherapy and subcutaneous immunotherapy models for cows milk and peanut allergy."

Authors: Vonk MM,Wagenaar L,Pieters RHH,Knippels LMJ,Willemsen LEM,Smit JJ,van Esch BCAM,Garssen J

**Species**  
Mouse

**Dilution**  
1:200

**Year**  
2020

### Oncoimmunology

#### Interleukin-21 combined with PD-1 or CTLA-4 blockade enhances antitumor immunity in mouse tumor models.

"12-0251 was used in Flow cytometry/Cell sorting to investigate the efficacy of immune-modulatory interleukin-21 combined with checkpoint blockade in several syngeneic mouse tumor models."

Authors: Lewis KE,Selby MJ,Masters G,Valle J,Dito G,Curtis WR,Garcia R,Mink KA,Waggie KS,Holdren MS,Grosso JF,Korman AJ,Jure-Kunkel M,Dillon SR

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2020

[View more Flow references on thermofisher.com](#)

## Miscellaneous PubMed (3)

### Nature communications

#### Itk is required for Th9 differentiation via TCR-mediated induction of IL-2 and IRF4.

"12-0251 was used in Magnetic cell separation to investigate the role of IL-9 in allergic asthma and autoimmunity, showing that Itk is required for Th9 differentiation via TCR-mediated induction of IL-2 and IRF4."

Authors: Gomez-Rodriguez J,Meylan F,Handon R,Hayes ET,Anderson SM,Kirby MR,Siegel RM,Schwartzberg PL

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2016

### International immunology

#### An MHC-linked locus modulates thymic differentiation of CD4+CD25+Foxp3+ regulatory T lymphocytes.

"12-0251 was used in Flow cytometry/Cell sorting to investigate factors that affect the levels of Tregs in the thymus."

Authors: Tellier J,van Meerwijk JP,Romagnoli P

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2006

[View more Misc references on thermofisher.com](#)

## More applications with references on thermofisher.com

IF (1) FN (3) WB (1)

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