

# CD25 Monoclonal Antibody (PC61.5), eFluor 450, 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), eFluor 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PC61.5
Conjugate	eFluor® 450
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_10671550

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	37 Publications
Functional Assay (FN)	-	2 Publications
Neutralization (Neu)	-	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:** This PC61.5 antibody has been reported for use in flow cytometric analysis.

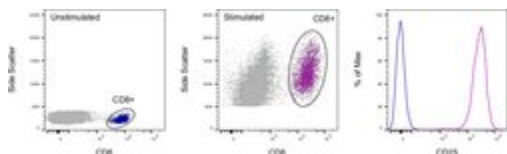
**Applications Tested:** This PC61.5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be 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.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

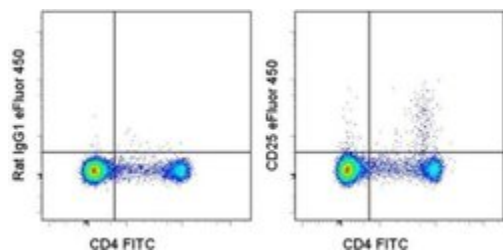
## ✓ Advanced Verification Data



### CD25 Antibody (48-0251-82)

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), eFluor 450, eBioscience™



### CD25 Antibody (48-0251-82) in Flow

Staining of C57Bl/6 splenocytes with Anti-Mouse CD4 FITC (Product # 11-0041-82) and 0.25 µg of Rat IgG1 kappa Isotype Control eFluor® 450 (Product # 48-4301-82) (left) or 0.25 µg of Anti-Mouse CD25 eFluor® 450 (right). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## 40 References

### Flow Cytometry (37)

#### Inflammation and regeneration

##### Immunosuppressive effect of mesenchymal stem cell-derived exosomes on a concanavalin A-induced liver injury model.

"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Flow Cytometry"

Authors: Tamura R,Uemoto S,Tabata Y

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2020

#### Immunity

##### An Id2<sup>RFP</sup>-Reporter Mouse Redefines Innate Lymphoid Cell Precursor Potentials.

"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Flow Cytometry"

Authors: Xu W,Cherrier DE,Chea S,Vosshenrich C,Serafini N,Petit M,Liu P,Golub R,Di Santo JP

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

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

### Neutralization (1)

#### EMBO molecular medicine

##### TGF-1 secreted by Tregs in lymph nodes promotes breast cancer malignancy via up-regulation of IL-17RB.

"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Neutralization"

Authors: Huang SC,Wei PC,Hwang-Verslues WW,Kuo WH,Jeng YM,Hu CM,Shew JY,Huang CS,Chang KJ,Lee EY,Lee WH

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

### 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

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2007

### More applications with references on thermofisher.com

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