

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

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG1, lambda
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PC61.5
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_468914

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	97 Publications
Neutralization (Neu)	Assay-Dependent	5 Publications
Functional Assay (FN)	Assay-Dependent	15 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, and in vitro blocking of mouse CD25 (IL-2R alpha, p55).

**Applications Tested:** The PC61.5 antibody has been tested by flow cytometric analysis of mouse spleen cells and Con A-stimulated splenocyte culture. 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  $\mu$ L. 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.

Storage and handling: Use in a sterile environment.

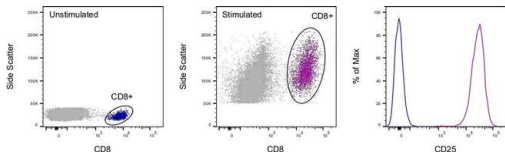
Filtration: 0.2  $\mu$ m post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/ $\mu$ g antibody, as determined by LAL assay.

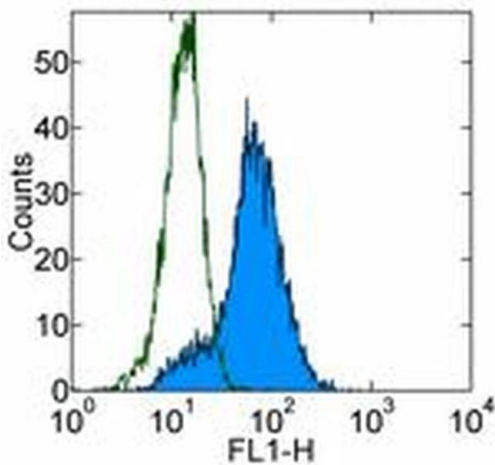
Aggregation: Less than 10%, as determined by HPLC.

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



### CD25 Antibody (16-0251-85)

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 (16-0251-85) in Flow

Staining of 3-day ConA activated C57Bl/6 splenocytes with 0.25  $\mu$ g of Rat IgG1 kappa Isotype Control Purified (Product # 14-4301-82) (open histogram) or 0.25  $\mu$ g of Anti-Mouse CD25 Purified (filled histogram) followed by Anti-Rat IgG FITC (Product # 11-4811-85). Total viable cells were used for analysis.

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

## Western Blot (1)

### Cell reports

#### Mitochondrial Pyruvate Carrier 1 Promotes Peripheral T Cell Homeostasis through Metabolic Regulation of Thymic Development.

"Published figure using CD25 monoclonal antibody (Product # 16-0251-85) in Western Blot"

Authors: Ramstead AG,Wallace JA,Lee SH,Bauer KM,Tang WW,Ekiz HA,Lane TE,Cluntun AA,Bettini ML,Round JL,Rutter J,O'Connell RM

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2020

## Immunohistochemistry (1)

### International journal of molecular sciences

#### Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.

"Published figure using CD25 monoclonal antibody (Product # 16-0251-85) in Immunohistochemistry"

Authors: Sato S,Shimizu E,He J,Ogawa M,Asai K,Yazu H,Rusch R,Yamane M,Yang F,Fukuda S,Kawakami Y,Tsubota K,Ogawa Y

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

## Flow Cytometry (97)

### 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 # 16-0251-85) in Flow Cytometry"

Authors: Tamura R,Uemoto S,Tabata Y

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2022

### Frontiers in immunology

#### CD4<sup>+</sup> T Cell Fate Decisions Are Stochastic, Precede Cell Division, Depend on G1TR Co-Stimulation, and Are Associated With Uropodium Development.

"Published figure using CD25 monoclonal antibody (Product # 16-0251-85) in Flow Cytometry"

Authors: Cobbold SP,Adams E,Howie D,Waldmann H

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2022

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

## More applications with references on thermofisher.com

**Neu (5)** **FN (15)**

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