

# CD25 Monoclonal Antibody (PC61.5), eFluor™ 450, eBioscience™

## Product Details

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| Size                        | 100 µg  |
| Species Reactivity          | Mouse   |
| Published Species           | Mouse   |
| Host/Isotype                | 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   |
| Excitation/Emission Max     | 405/445 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_10671550   |

| Applications               | Tested Dilution | Publications    |
|----------------------------|-----------------|-----------------|
| Immunohistochemistry (IHC) | -               | 1 Publication   |
| Flow Cytometry (Flow)      | 0.5 µg/test     | 82 Publications |
| Neutralization (Neu)       | -               | 2 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:** This PC61.5 antibody has been reported for use in flow cytometric analysis.

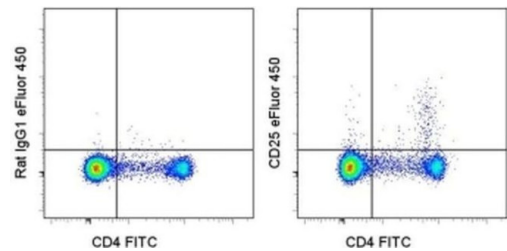
**Applications Tested:** This PC61.5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be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

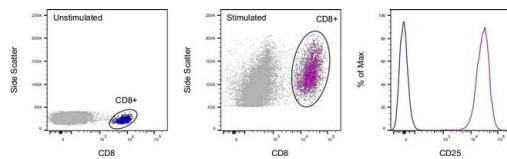
Filtration: 0.2 µm post-manufacturing filtered.

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.



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. {TM}

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Immunohistochemistry (1)

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| <p>International journal of molecular sciences</p> <p><b>Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.</b></p> <p>"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Immunohistochemistry"</p> <p>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</p> | <p>Year<br/>2021</p> |
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Flow Cytometry (82)

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| <p>Nature communications</p> <p><b>Immunotherapy targeting plasma ASM is protective in a mouse model of Alzheimer's disease.</b></p> <p>"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Flow Cytometry"</p> <p>Authors: Choi BJ,Park MH,Park KH,Han WH,Yoon HJ,Jung HY,Hong JY,Chowdhury MR,Kim KY,Lee J,Song IS,Pang M,Choi MK,Gulbins E,Reichel M,Kornhuber J,Hong CW,Kim C,Kim SH,Schuchman EH,Jin HK,Bae JS</p> | <p>Year<br/>2023</p> |
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| <p>Nature communications</p> <p><b>Aiolos represses CD4<sup>+</sup> T cell cytotoxic programming via reciprocal regulation of T<sub>FH</sub> transcription factors and IL-2 sensitivity.</b></p> <p>"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Flow Cytometry"</p> <p>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</p> | <p>Year<br/>2023</p> |
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View more Flow references on thermofisher.com

Neutralization (2)

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| <p>Frontiers in cell and developmental biology</p> <p><b>Allergen-Specific Treg Cells Upregulated by Lung-Stage <i>S. japonicum</i> Infection Alleviates Allergic Airway Inflammation.</b></p> <p>"Published figure using CD25 monoclonal antibody (Product # 48-0251-82) in Neutralization"</p> <p>Authors: Li Z,Zhang W,Luo F,Li J,Yang W,Zhu B,Wu Q,Wang X,Sun C,Xie Y,Xu B,Wang Z,Qian F,Chen J,Wan Y,Hu W</p> | <p>Year<br/>2021</p> |
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More applications with references on thermofisher.com

FN (2)

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