

## Anti-Mouse CD25 eFluor® 450

Catalog Number: 48-0251

Also known as: Interleukin-2 Receptor alpha

RUO: For Research Use Only. Not for use in diagnostic procedures.



## 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  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) 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<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 a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochome.

#### References

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. Combination of tumor site-located CTL-associated antigen-4 blockade and systemic regulatory T-cell depletion induces tumor-destructive immune responses. Cancer Res. 2007 Jun 15;67(12):5929-39. (**PC61.5**, in vivo depletion, PubMed)

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. Listeria monocytogenes promotes tumor growth via tumor cell toll-like receptor 2 signaling. Cancer Res. 2007 May



# Anti-Mouse CD25 eFluor® 450

Catalog Number: 48-0251 Also known as: Interleukin-2 Receptor alpha RUO: For Research Use Only. Not for use in diagnostic procedures.

1;67(9):4346-52. (PC61.5, in vivo depletion, PubMed)

Hayashi T, Hasegawa K, Adachi C. Elimination of CD4+CD25+ T cell accelerates the development of glomerulonephritis during the preactive phase in autoimmune-prone female NZB × NZW F1 mice. Int J Exp Pathol. 2005 Oct;86(5):289-96. (**PC61.5**, in vivo depletion, PubMed)

Lowenthal JW, Corthésy P, Tougne C, Lees R, MacDonald HR, Nabholz M. High and low affinity IL 2 receptors: analysis by IL 2 dissociation rate and reactivity with monoclonal anti-receptor antibody PC61. J Immunol. 1985 Dec;135(6):3988-94.

Lowenthal JW, Zubler RH, Nabholz M, MacDonald HR. Similarities between interleukin-2 receptor number and affinity on activated B and T lymphocytes. Nature. 1985 Jun 20-26;315(6021):669-72.

Lowenthal JW, Tougne C, MacDonald HR, Smith KA, Nabholz M. Antigenic stimulation regulates the expression of IL 2 receptors in a cytolytic T lymphocyte clone. J Immunol. 1985 Feb;134(2):931-9.

### **Related Products**

11-0041 Anti-Mouse CD4 FITC (GK1.5) 48-4301 Rat IgG1 K Isotype Control eFluor® 450