TECHNICAL DATA SHEET

In Vivo Ready™ Anti-Mouse CD25 (PC61.5)

Catalog Number: 40-0251

PRODUCT INFORMATION

Contents: In Vivo Ready™ Anti-Mouse CD25 (PC61.5)

Isotype: Rat IgG1, lambda

Concentration: 2 mg/mL

Clone: PC61.5

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, pH7.2

Endotoxin Level: Less than or equal to 0.01 EU/ug, as determined by the LaL assay

DESCRIPTION

The PC61.5 antibody is specific for mouse CD25, a 55 kDa surface protein also known as the Interleukin-2 Receptor alpha chain, or IL-2R alpha. CD25 may bind IL-2 by itself, although with low affinity and without induction of cell signaling. CD25 is also expressed within a high-affinity complex, along with the IL-2R beta chain (CD122) and the common gamma chain (CD132), to form a signaling receptor complex. Expression of CD25 varies during developmental stages of T and B cells, is induced on activated mature T and B cells, and is present on subsets of dendritic cells. CD25 signaling as part of the IL-2 receptor complex triggers T cell activation and proliferation, as well as modulating the differentiation and function of Th17 cells, T regulatory (Treg) cells, and dendritic cells. The PC61.5 antibody is used as a marker for T cells, B cells and dendritic cell subsets. Expression of CD25, CD4 and the transcription factor Foxp3 is regarded as a phenotypic signature for Treg cells. As such, this antibody is widely used for depletion of Treg cells in vivo, as well as to distinguish Treg cells from naïve or conventional T cells which are CD25-.

PREPARATION & STORAGE

This monoclonal antibody preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

APPLICATION NOTES

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

REFERENCES

Liang D, Zuo A, Shao H, Born WK, O'Brian R, Kaplan HJ, and Sun D. 2012. J. Immunol. 188: 5785-5791. (in vivo blocking)Yu P, Steel JC, Zhang M, Morris JC, Waitz R, Fasso M, Allison JP, and Waldmann TA. 2012. Proc. Natl. Acad. Sci. 109:6187-6192. (in vivo Treg depletion)Billiard F, Lobry C, Darrasse-Jeze G, Waite J, Liu et al. 2012. Blood. 119: 4656-4664. (in vivo Treg depletion)Tang S, Moore ML, Grayson JM and Dubey P. 2012. Cancer Res. 72: 1975-1985. (in vivo Treg depletion)Lee L-F, Logronio K, Tu GH, Zhai W, Ni I, Mei L, Dilley J, Yu J, et al. 2012. Proc. Natl. Acad. Sci. 10.1073. (flow cytometry).10F.9G2, J43, PC61 Koehn BH, Ford ML, Ferrer IR, Borom K, Gangappa S, Kirk AD, and Larsen CP. 2008. J. Immunol. 181:5313-5322. (in vivo blocking)Leithauser F, Meinhardt-Krajina T, Fink K, Wotschke B, Moller P and Reimann J. 2006. Am. J. Pathol. 168(6): 1898-1909. (immunohistochemistry – frozen tissue)Hashimoto N, Nabholz M, MacDonald HR, and Zubler RH. 1986. Eur. J. Immunol. 16(3): 317-320. (Blocking)Ceredig R, Lowenthal JW, Nabholz M, and MacDonald R. 1985. Nature. 314:98-100 (immunohistochemistry)Lowenthal JW, Zulber RH, Nabholz M, and MacDonald HR. 1985. Nature. 315(6021): 669-672. (immunoprecipitation, Blocking)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.