

11-614-C100

Monoclonal Antibody to CD25 (mouse) Purified Antibody (0.1 mg)

Clone:	PC61.5
Isotype:	Rat IgG1
Specificity:	The rat monoclonal antibody PC61.5 (PC61.5.3) recognizes CD25 (Interleukin-2 receptor alpha chain), a 55 kDa type I transmembrane glycoprotein expressed on activated B and T lymphocytes, activated monocytes/macrophages and on CD4 ⁺ T lymphocytes (T regulatory cells); it is lost on resting B and T lymphocytes.
Regulatory Status:	RUO
Immunogen:	B6.1 CTL cell line
Species Reactivity:	Mouse
Application:	Flow Cytometry Immunoprecipitation Immunohistochemistry (frozen sections) Functional Application In vitro blocking of IL-2 binding to its receptor (CD25) and inhibition of IL-2 stimulated cell growth. In vivo depletion of CD25 positive cells.
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD25 (IL2Ralpha, Tac) is a ligand-binding alpha subunit of interleukin 2 receptor (IL2R). Together with beta and gamma subunit CD25 constitutes the high affinity IL2R, whereas CD25 alone serves as the low affinity IL2R. CD25 expression rapidly increases upon T cell activation. The 55 kDa CD25 molecule is enzymatically cleaved and shed from the cell surface as a soluble 45 kDa s-Tac, whose concentration in serum can be used as a marker of T cell activation. Expression of CD25 indicates the neoplastic phenotype of mast cells. CD25+ CD4+ FoxP3+ regulatory cells (Treg cells) play a crucial role in the control of organ-specific autoimmune diseases.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

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- *Tenorio EP, Olguín JE, Fernández J, Vieyra P, Saavedra R: Reduction of Foxp3+ cells by depletion with the PC61 mAb induces mortality in resistant BALB/c mice infected with *Toxoplasma gondii*. *J Biomed Biotechnol.* 2010;2010:786078.
- *And many other.

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