



# Rat Anti-Mouse CD25 (IL-2R $\alpha$ ) Monoclonal antibody, clone PC-61.5.3 (CABT-L4357)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	The PC-61.5.3 monoclonal antibody reacts with mouse IL-2R $\alpha$ also known as CD25, Ly-43, p55, or Tac. IL-2R $\alpha$ is the 55 kDa ligand-binding subunit of the interleukin 2 receptor alpha chain.
<b>Target</b>	Mouse CD25 (IL-2R $\alpha$ )
<b>Immunogen</b>	IL-2-dependent cytolytic mouse T cell clone B6.1
<b>Isotype</b>	IgG1, $\lambda$
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	PC-61.5.3
<b>Purification</b>	Protein A High Salt purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	in vivo regulatory T cell depletion, FC
<b>Molecular Weight</b>	150 kDa
<b>Format</b>	0.2 $\mu$ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
<b>Concentration</b>	Lot specific
<b>Size</b>	5 mg

<b>Buffer</b>	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]  Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
<b>Preservative</b>	None
<b>Storage</b>	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	The PC-61.5.3 monoclonal antibody reacts with mouse IL-2Rα also known as CD25, Ly-43, p55, or Tac. IL-2Rα is the 55 kDa ligand-binding subunit of the interleukin 2 receptor alpha chain. IL-2Rα is expressed on activated mature T and B lymphocytes, thymocyte subsets, pre-B cells, and T regulatory cells. IL-2Rα has been shown to play roles in lymphocyte differentiation, activation, and proliferation. Alone, the IL-2Rα binds IL-2 with relatively low affinity however, when IL-2Rα associates with IL-2Rβ (CD122) and the common gamma chain (CD132) the complex binds IL-2 with high affinity. The PC-61.5.3 antibody has been shown to inhibit the binding of IL-2 to both the low and high affinity IL-2 receptor forms. Additionally, the PC-61.5.3 antibody is commonly used to deplete CD4+FoxP3+ T regulatory cells in vivo.
<b>Keywords</b>	IL2RA;CD25;interleukin-2 receptor subunit alpha;p55;IL2-RA;IL-2-RA;IL-2R alpha;TAC antigen;cytokine receptor;IL-2R subunit alpha;IL-2 receptor alpha subunit;IL-2 receptor subunit alpha;interleukin-2 receptor alpha chain;

## GENE INFORMATION

<b>Official Symbol</b>	interleukin 2 receptor, alpha
<b>Synonyms</b>	IL2RA; CD25; interleukin-2 receptor subunit alpha; p55; IL2-RA; IL-2-RA; IL-2R alpha; TAC antigen; cytokine receptor; IL-2R subunit alpha; IL-2 receptor alpha subunit; IL-2 receptor subunit alpha; interleukin-2 receptor alpha chain;
<b>References</b>	Goschl, L., et al. (2018). "A T cell-specific deletion of HDAC1 protects against experimental autoimmune encephalomyelitis." J Autoimmun 86: 51-61. PubMed;Richter, K., et al. (2013). "Macrophage and T cell produced IL-10 promotes viral chronicity." PLoS Pathog 9(11): e1003735. PubMed;Locatelli, G., et al. (2012). "Primary oligodendrocyte death does not elicit anti-CNS immunity." Nat Neurosci 15(4): 543-550. PubMed;Tang, S., et al. (2012). "Increased CD8+ T-cell function following castration and immunization is countered by parallel expansion of regulatory T cells." Cancer Res 72(8): 1975-1985. PubMed;Mohamadzadeh, M., et al. (2011). "Regulation of induced colonic inflammation by Lactobacillus acidophilus deficient in

