



# Rat Anti-Mouse IL-7R $\alpha$ (CD127) Monoclonal antibody, clone A7R34 (CABT-L4337)

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

## PRODUCT INFORMATION

### Product Overview

The A7R34 monoclonal antibody reacts with mouse IL-7R $\alpha$  also known as CD127. IL-7R $\alpha$  is a 60-90 kDa type I transmembrane glycoprotein expressed on immature B cells, thymocytes, peripheral T cells, and bone marrow stromal cells. IL-7R $\alpha$  forms a heterodimer with the common  $\gamma$  chain ( $\gamma$ c or CD132) and upon ligation of IL-7 plays important roles in T and B cell development, and T cell homeostasis. Thymic Stromal Lymphopoietin (TSLP) also binds to IL-7R $\alpha$  as a complex with the TSLPR chain to trigger activation of dendritic cells, and is also involved in B cell development, allergy and autoimmunity. The A7R34 antibody has been shown to block IL-7R $\alpha$  signaling when administered in vivo.

<b>Target</b>	Mouse IL-7R $\alpha$ (CD127)
<b>Immunogen</b>	IL-7R $\alpha$ -IgG1 fusion protein
<b>Isotype</b>	IgG2a, $\kappa$
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	A7R34
<b>Purification</b>	Protein G purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	in vivo blocking of IL-7R $\alpha$ signaling, 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>	Interleukin-7 is a glycoprotein involved in the regulation of lymphopoiesis. Response of cells to IL7 is dependent on the presence of the interleukin 7 receptor (IL7R); the active receptor is a alpha/gamma chain heterodimer. The gamma(c) chain, which also associates with the interleukin-2 receptor, serves primarily to activate signal transduction by the IL7R complex, while the alpha chain of IL7R determines specific signaling events through its association with cytoplasmic signaling molecules. [provided by RefSeq, Jul 2008]
<b>Keywords</b>	IL7R;interleukin 7 receptor;CD127;IL-7Ralpha;interleukin-7 receptor subunit alpha;IL-7RA;IL-7R-alpha;IL-7R subunit alpha;IL-7 receptor alpha chain;IL-7 receptor subunit alpha;interleukin 7 receptor alpha chain;

## GENE INFORMATION

<b>Official Symbol</b>	interleukin 7 receptor
<b>Synonyms</b>	IL7R; interleukin 7 receptor; CD127; IL-7Ralpha; interleukin-7 receptor subunit alpha; IL-7RA; IL-7R-alpha; IL-7R subunit alpha; IL-7 receptor alpha chain; IL-7 receptor subunit alpha; interleukin 7 receptor alpha chain;
<b>References</b>	Becker, A. M., et al. (2015). "ADAM17 limits the expression of CSF1R on murine hematopoietic progenitors." Exp Hematol 43(1): 44-52 e41-43. PubMed;Chougnnet, C. A., et al. (2011). "A major role for Bim in regulatory T cell homeostasis." J Immunol 186(1): 156-163. PubMed;