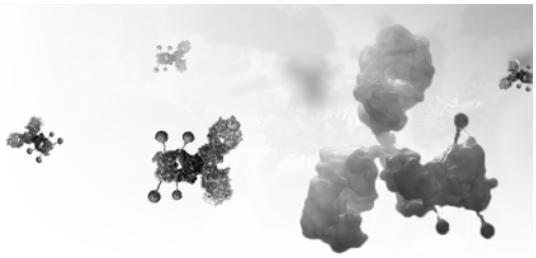

Rat Anti-Mouse IL-21R Monoclonal antibody, clone 4A9 (CABT-L4502)

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

PRODUCT INFORMATION

Product Overview	The 4A9 monoclonal antibody reacts with mouse IL-21 receptor (IL-21 R) also known as CD360. IL-21 R is a member of the type 1 cytokine receptor family that forms a functional heterodimeric receptor complex with the common gamma chain (CD132). IL-21 R is expressed on both resting and activated B cells, T cells, NK cells and dendritic cells. Upon IL-21 binding, IL-21 R activates downstream Jak-1, Jak-3, STAT1, STAT3 and STAT 5 signal transduction pathways to induce the proliferation and differentiation of T lymphocytes, B lymphocytes, and NK cells. The 4A9 antibody has been shown to block the biological activity of IL-21 R in vivo.
Target	Mouse IL-21R
Immunogen	Rat YB2/0 cell line expressing truncated IL-21 R
Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	4A9
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo IL-21R blockade
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility

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Concentration	Lot specific
Size	5 mg
Buffer	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
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The protein encoded by this gene is a cytokine receptor for interleukin 21 (IL21). It belongs to the type I cytokine receptors, and has been shown to form a heterodimeric receptor complex with the common gamma-chain, a receptor subunit also shared by the receptors for interleukin 2, 4, 7, 9, and 15. This receptor transduces the growth promoting signal of IL21, and is important for the proliferation and differentiation of T cells, B cells, and natural killer (NK) cells. The ligand binding of this receptor leads to the activation of multiple downstream signaling molecules, including JAK1, JAK3, STAT1, and STAT3. Knockout studies of a similar gene in mouse suggest a role for this gene in regulating immunoglobulin production. Three alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2010]
Keywords	IL21R;interleukin 21 receptor;NILR;CD360;interleukin-21 receptor;IL-21 receptor;novel interleukin receptor;

GENE INFORMATION

Official Symbol	interleukin 21 receptor
Synonyms	IL21R; interleukin 21 receptor; NILR; CD360; interleukin-21 receptor; IL-21 receptor; novel interleukin receptor;
References	Clemente-Casares, X., et al. (2016). "Expanding antigen-specific regulatory networks to treat autoimmunity." Nature 530(7591): 434-440. PubMed;

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