



Rat Anti-Mouse IL-15 Monoclonal antibody, clone AIO.3 (CABT-L4540)

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

PRODUCT INFORMATION

Product Overview

The AIO.3 monoclonal antibody reacts with mouse IL-15. IL-15 is a pro-inflammatory cytokine that is produced mainly by dendritic cells, epithelial cells, fibroblasts, and monocytes. IL-15 plays important roles in the immune response and shares many functions with IL-2. IL-15 has been shown to stimulate the proliferation of activated T cells, NK cells, and B cells, and induce antibody production by B cells stimulated with anti-IgM or CD40L. In addition, IL-15 promotes the development of dendritic cells and induces the production of proinflammatory cytokines from macrophages. IL-15 has also been shown to play a role in several inflammatory disorders, including rheumatoid arthritis, psoriasis and pulmonary inflammatory diseases. Emerging data suggest that there is a beneficial effect of IL-15 neutralization in models of psoriasis and diabetes. The AIO.3 antibody has been shown to neutralize the bioactivity of IL-15 in vitro and in vivo.

Target	Mouse IL-15
Immunogen	Recombinant mouse IL-15
Isotype	IgG2a, λ
Source/Host	Rat
Species Reactivity	Mouse
Clone	AIO.3
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo IL-15 neutralization, in vitro IL-15 neutralization

Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
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 that regulates T and natural killer cell activation and proliferation. This cytokine and interleukine 2 share many biological activities. They are found to bind common hematopoietin receptor subunits, and may compete for the same receptor, and thus negatively regulate each others activity. The number of CD8+ memory cells is shown to be controlled by a balance between this cytokine and IL2. This cytokine induces the activation of JAK kinases, as well as the phosphorylation and activation of transcription activators STAT3, STAT5, and STAT6. Studies of the mouse counterpart suggested that this cytokine may increase the expression of apoptosis inhibitor BCL2L1/BCL-x(L), possibly through the transcription activation activity of STAT6, and thus prevent apoptosis. Alternatively spliced transcript variants of this gene have been reported. [provided by RefSeq, Feb 2011]
Keywords	IL15;interleukin 15;IL-15;interleukin-15;

GENE INFORMATION

Official Symbol	interleukin 15
Synonyms	IL15; interleukin 15; IL-15; interleukin-15;
References	Li, H. Y., et al. (2017). "The Tumor Microenvironment Regulates Sensitivity of Murine Lung Tumors to PD-1/PD-L1 Antibody Blockade." <i>Cancer Immunol Res</i> 5(9): 767-777. PubMed;