



# Mouse Anti-Human IL-4 monoclonal antibody, clone NN15 (CABT-ZB870)

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

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human IL-4
<b>Target</b>	IL4
<b>Immunogen</b>	Recombinant Human IL4/IL-4/Interleukin-4 Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN15
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(det) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB498 - CABT-ZB870 This antibody will detect IL-4 in antibody pair set. [ABPR-ZB073]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human IL4/IL-4/Interleukin-4. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific

<b>Size</b>	50 µL, 100 µL, 200 µL, 1 mL
<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

**Introduction** Interleukin-4, also known as IL4, is a secreted protein that belongs to the IL-4/IL-13 family. Interleukin-4/IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation. It enhances both secretion and cell surface expression of IgE and IgG1. Interleukin-4/IL4 also regulates the expression of the low-affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Interleukin-4 is essential for the switching of B cells to IgE antibody production and the maturation of T helper (Th) cells toward the Th2 phenotype. It participates in at least several B-cell activation processes as well as other cell types. However, studies show that double mutant (Q116D, Y119D) of the murine IL4 protein (QY), both glutamine 116 and tyrosine 119, which binds to the IL4 receptor alpha, completely inhibits in a dose-dependent manner the IL4-induced proliferation of lipopolysaccharide-stimulated murine splenic B-cells, of the murine T cell line CTLL-2, and the murine pre-B-cell line BA/F3. QY also inhibited the IL4-stimulated up-regulation of CD23 expression by lipopolysaccharide-stimulated murine splenic B-cells and abolished tyrosine phosphorylation of the transcription factor Stat6 and the tyrosine kinase Jak3 in IL4-stimulated BA/F3 cells.

**Keywords** IL5; interleukin 5; EDF; TRF

## GENE INFORMATION

**Synonyms** IL5; interleukin 5; EDF; TRF; IL-5; interleukin-5; T-cell replacing factor; B-cell differentiation factor I; eosinophil differentiation factor; colony-stimulating factor, eosinophil

**Entrez Gene ID** [3567](#)

**UniProt ID** [P05113](#)