

Anti-IL-3 Antibody
Catalog # ABO12730**Specification**

Anti-IL-3 Antibody - Product Information

Application	WB
Primary Accession	P04823
Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Interleukin-3(IL3) detection. Tested with WB, ELISA in Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IL-3 Antibody - Additional Information**Other Names**

Interleukin-3, IL-3, Hematopoietic growth factor, Mast cell growth factor, MCGF, Multipotential colony-stimulating factor, P-cell-stimulating factor, Il3, Il-3

Calculated MW

18631 MW KDa

Application Details

ELISA , 0.1-0.5 µg/ml, Rat, -
Western blot, 0.1-0.5 µg/ml, Rat

Subcellular Localization

Secreted.

Tissue Specificity

Activated T-cells, mast cells, natural killer cells.

Protein Name

Interleukin-3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E. coli-derived rat IL-3 recombinant protein (Position: S28-C166). Rat IL-3 shares 32% and 55% amino acid (aa) sequence identity with human and mouse IL-3, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-IL-3 Antibody - Protein Information

Name IL3

Synonyms IL-3

Function

Cytokine secreted predominantly by activated T-lymphocytes as well as mast cells and osteoblastic cells that controls the production and differentiation of hematopoietic progenitor cells into lineage-restricted cells. Stimulates also mature basophils, eosinophils, and monocytes to become functionally activated. In addition, plays an important role in neural cell proliferation and survival. Participates as well in bone homeostasis and inhibits osteoclast differentiation by preventing NF-kappa-B nuclear translocation and activation (PubMed: [34183475](http://www.uniprot.org/citations/34183475)).

Mechanistically, exerts its biological effects through a receptor composed of IL3RA subunit and a signal transducing subunit IL3RB (By similarity). Receptor stimulation results in the rapid activation of JAK2 kinase activity leading to STAT5-mediated transcriptional program. Alternatively, contributes to cell survival under oxidative stress in non-hematopoietic systems by activating pathways mediated by PI3K/AKT and ERK (By similarity).

Cellular Location

Secreted.

Tissue Location

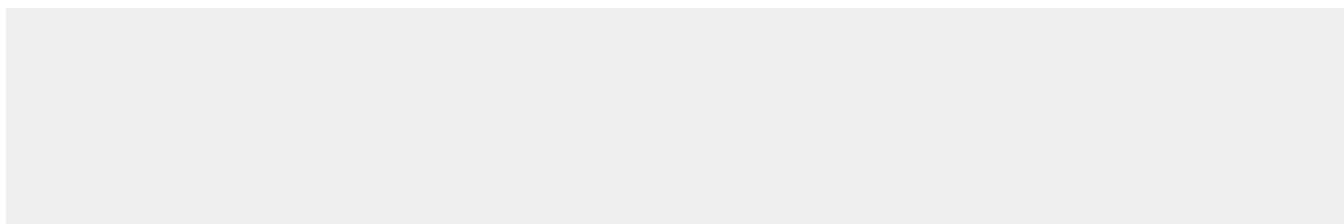
Activated T-cells, mast cells, natural killer cells

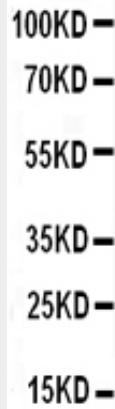
Anti-IL-3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-IL-3 Antibody - Images





Anti- IL-3 antibody, ABO12730, Western blotting All lanes: Anti IL-3 (ABO12730) at 0.5ug/ml WB: Recombinant Rat IL-3 Protein 0.5ng Predicted bind size: 15KD Observed bind size: 15KD



Anti- IL-3 antibody, ABO12730, Western blotting All lanes: Anti IL-3 (ABO12730) at 0.5ug/ml Lane 1: PC-12 Whole Cell Lysate at 40ug Lane 2: NRK Whole Cell Lysate at 40ug Lane 3: RH35 Whole Cell Lysate at 40ug Predicted bind size: 17KD Observed bind size: 37KD

Anti-IL-3 Antibody - Background

Interleukin 3, also known as IL-3, is a protein that in humans is encoded by the IL3 gene. It is mapped to 5q31.1. IL-3 is an interleukin, a type of biological signal (cytokine) that can improve the body's natural response to disease as part of the immune system. It acts by binding to the interleukin-3 receptor. IL-3 stimulates the differentiation of multipotent hematopoietic stem cells into myeloid progenitor cells or, with the addition of IL-7, into lymphoid progenitor cells. In addition, IL-3 stimulates proliferation of all cells in the myeloid lineage (granulocytes, monocytes, and dendritic cells), in conjunction with other cytokines, e.g., Erythropoietin (EPO), Granulocyte macrophage colony-stimulating factor (GM-CSF), and IL-6. IL-3 is secreted by basophils and activated T cells to support growth and differentiation of T cells from the bone marrow in an immune response.