10320 Camino Santa Fe, Suite G
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# Anti-IL-3 Antibody
**Catalog # ABO12730**

## Specification

### Anti-IL-3 Antibody - Product Information

| | |
|---|---|
| Application | **WB, E** |
| 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, -<br>Western blot, 0.1-0.5 µg/ml, Rat<br>

**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 r˚Constitution, 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. Also stimulates 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:<a href="http://www.uniprot.org/citations/34183475" target="_blank">34183475</a>). 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 Cytomety
- Cell Culture

## Anti-IL-3 Antibody - Images

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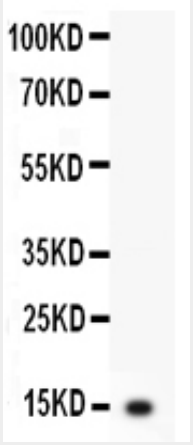


Anti- IL-3 antibody, ABO12730, Western blottingAll lanes: Anti IL-3 (ABO12730) at 0.5ug/mlWB: Recombinant Rat IL-3 Protein 0.5ngPredicted bind size: 15KDObserved bind size: 15KD


Anti- IL-3 antibody, ABO12730, Western blottingAll lanes: Anti IL-3 (ABO12730) at 0.5ug/mlLane 1: PC-12 Whole Cell Lysate at 40ugLane 2: NRK Whole Cell Lysate at 40ugLane 3: RH35 Whole Cell Lysate at 40ugPredicted bind size: 17KDObserved 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.