

Anti-IL-3 Antibody

Catalog # ABO11037

Specification

Anti-IL-3 Antibody - Product Information

ApplicationWBPrimary AccessionP01586HostRabbitReactivityMouseClonalityPolyclonalFormatLyophilizedDescriptionBabbit IgG polyclonal antibody for Interleukin-3(II 3) detection. Tested

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

Reconstitution

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

Anti-IL-3 Antibody - Additional Information

Gene ID 16187

Other Names Interleukin-3, IL-3, Hematopoietic growth factor, Mast cell growth factor, MCGF, Multipotential colony-stimulating factor, P-cell-stimulating factor, II3, Csfmu, II-3

Calculated MW 18540 MW KDa

Application Details Western blot, 0.1-0.5 µg/ml, Mouse

Subcellular Localization Secreted.

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

Protein Name Interleukin-3(IL-3)

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

Immunogen A synthetic peptide corresponding to a sequence in the middle region of mouse IL-3(122-140aa, RDLDDFRKKLRFYMVHLND).

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 II3

Synonyms Csfmu, II-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. 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 (PubMed:10376805, PubMed:31990690, PubMed:8378315). 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.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-IL-3 Antibody - Images



Anti-IL-3 antibody, ABO11037, Western blottingAll lanes: Anti IL-3 (ABO11037) at 0.5ug/mlLane 1: Recombinant Mouse IL-3 Protein 10ngLane 2: Recombinant Mouse IL-3 Protein 5ngLane 3: Recombinant Mouse IL-3 Protein 2.5ngPredicted bind size: 14KDObserved bind size: 14KD

Anti-IL-3 Antibody - Background

Interleukin 3, also known as IL-3, is a protein that in humans is encoded by the IL3 gene. Ot 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.