

Anti-IL-3 Antibody

Catalog # ABO11057

Specification

Anti-IL-3 Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP08700HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit InG polyclonal antibody for Interleukin-3(II 3) detection. Tested

Rabbit IgG polyclonal antibody for Interleukin-3(IL3) detection. Tested with WB, IHC-P in Human.

Reconstitution

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

Anti-IL-3 Antibody - Additional Information

Gene ID 3562

Other Names Interleukin-3, IL-3, Hematopoietic growth factor, Mast cell growth factor, MCGF, Multipotential colony-stimulating factor, P-cell-stimulating factor, IL3

Calculated MW 17233 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat

Western blot, 0.1-0.5 μg/ml, Human

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 at the N-terminus of human IL-3(119-140aa, KDGDWNEFRRKLTFYLKTLENA).

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.

Sequence Similarities Belongs to the IL-3 family.

Anti-IL-3 Antibody - Protein Information

Name IL3 (<u>HGNC:6011</u>)

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 (PubMed: 2556442). Also stimulates mature basophils, eosinophils, and monocytes to become functionally activated (PubMed: 10779277, PubMed:32889153). In addition, plays an important role in neural cell proliferation and survival (PubMed: 23226269). Participates as well in bone homeostasis and inhibits osteoclast differentiation by preventing NF-kappa-B nuclear translocation and activation (PubMed:12816992). Mechanistically, exerts its biological effects through a receptor composed of IL3RA subunit and a signal transducing subunit IL3RB (PubMed:29374162). Receptor stimulation results in the rapid activation of JAK2 kinase activity leading to STAT5-mediated transcriptional program (By similarity). Alternatively, contributes to cell survival under oxidative stress in non- hematopoietic systems by activating pathways mediated by PI3K/AKT and ERK (PubMed:27862234).

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
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



Flow Cytomety

<u>Cell Culture</u>

Anti-IL-3 Antibody - Images



Anti-IL-3 antibody, ABO11057, Western blottingAll lanes: Anti IL-3 (ABO11057) at 0.5ug/mlLane 1: Recombinant Human IL-3 Protein 10ng Lane 2: Recombinant Human IL-3 Protein 5ng Lane 3: Recombinant Human IL-3 Protein 2.5ngPredicted bind size: 15KDObserved bind size: 15KD



Anti-IL-3 antibody, ABO11057, IHC(P)IHC(P): Human Tonsil Tissue

Anti-IL-3 Antibody - Background

The gene IL-3 encodes interleukin 3, a hematopoietic colony-stimulating factor(CSF) that is capable of supporting the proliferation of a broad range of hematopoietic cell types. Interleukin-3(IL-3), a protein of 140 amino acids, is chemically synthesized by means of an automated peptide synthesizer and is shown to have the biological activities attributed to native IL-3. The cDNA sequence for murine interleukin-3, one of the colony stimulating factors that regulate haematopoiesis, codes for a polypeptide of 166 amino acids including a putative signal peptide. The mouse IL 3 gene is located on chromosome 11. The human gene encoding IL 3 is tandemly arrayed on the long arm of chromosome 5.5 The standard product used in this kit is recombinant human IL-3, consisting of 133 amino acids with the molecular mass of 15KDa.