

Anti-IL-3 Antibody

Catalog # ABO10745

Product Information

Application	WB
Primary Accession	P08700
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Interleukin-3(IL3) detection. Tested with WB in Human.

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

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
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Secreted.
Tissue Specificity	Activated T-cells, mast cells, natural killer cells.
Source	Eukaryota
Protein Name	Interleukin-3(IL-3)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human IL-3(62-82aa EDQDILMENNLRPNLEAFNR).
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.

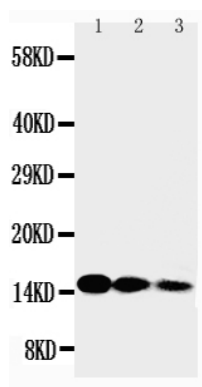
Protein Information

Name	IL3 (HGNC:6011)
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

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.¹ 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-3.² 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.³ The mouse IL 3 gene is located on chromosome 11.⁴ 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.

Images



Anti-IL-3 antibody, ABO10745, Western blotting
Lane 1:
Recombinant Human IL-3 Protein 10ng
Lane 2:
Recombinant Human IL-3 Protein 5ng
Lane 3:
Recombinant Human IL-3 Protein 2.5ng