

# **IL-3 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58039

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat
Host
Clonality
Polyclonal
Calculated MW
Physical State
P01586
Rat
Polyclonal
Rabbit
Polyclonal

Immunogen KLH conjugated synthetic peptide derived from mouse IL-3

**Epitope Specificity** 101-166/166

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Secreted.

**SIMILARITY** Belongs to the IL-3 family.

**SUBUNIT** Monomer.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** The pleiotropic IL3 (Interleukin 3) is a 15kDa cytokine that is primarily

secreted by activated T lymphocytes and stimulates the proliferation and differentiation of hematopoietic cells. IL3 acts in hematopoiesis by controlling

the production, differentiation, and function of two related white cell

populations of the blood, the granulocytes and the monocytes/macrophages. It induces granulocytes, macrophages, mast cells, stem cells, erythroid cells, eosinophils and megakaryocytes and is expressed by activated T cells, mast cells, and natural killer cells. IL3 not only supports growth of both pluripotent stem cells and the more differentiated committed progenitors, but it also stimulates the functional activity of some fully differentiated cells. IL3 has also

been shown to protect mast cells from undergoing apoptosis.

#### **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, Il3,

Csfmu, Il-3

**Target/Specificity** Activated T-cells, mast cells, natural killer cells.

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

-10000

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **Protein Information**

Name Il3

Synonyms Csfmu, Il-3

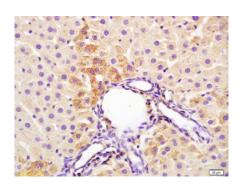
**Function** 

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. 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

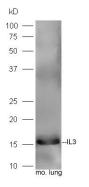
## **Images**



Tissue/cell: rat liver tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: EDTA( 0.01M, pH 9.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-IL-3 Polyclonal Antibody, Unconjugated(AP58039) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Sample: Lung(Mouse) lysate at 30ug; Primary: Anti- IL3 (AP58039) at 1:300 dilution; Secondary: HRP conjugated Goat-Anti-rabbit IgG(bs-0295G-HRP) at 1: 5000 dilution; Predicted band size:16 kD Observed band size:16 kD Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.