

IL-3 Rabbit pAb

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Catalog # AP58039

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P01586
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18540
Physical State	Liquid
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

Storage

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.

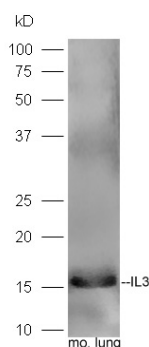
Tissue Location

Activated T-cells, mast cells, natural killer cells

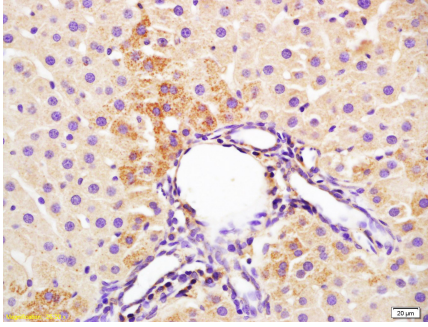
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Images



Sample: Lung(Mouse) lysate at 30ug;
Primary: Anti- IL3 (AP58039) at 1:300 dilution;
Secondary: HRP conjugated Goat-Anti-rabbit
IgG(AP58039-HRP) at 1: 5000 dilution;
Predicted band size:16 kD
Observed band size:16 kD



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.