

**Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated**  
**IL-3 Antibody Biotin Conjugated**  
**Catalog # ASR4969****Specification**

---

**Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated - Product Information**

Host	Rabbit
Conjugate	Biotin
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This purified antibody has been tested in western blotting and suitable in ELISA. By western blot a band approximately 15 kDa in size corresponding to human IL-3 protein is expected in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant human IL-3 protein.
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide

**Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated - Additional Information****Gene ID** 3562**Other Names**  
3562**Purity**

Biotin Conjugated Anti-Human IL-3 Antibody Biotin is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This purified antibody has been heated to 56°C for 30 minutes. In ELISA and other immunoreactive assays, this antibody will recognize both native and recombinant human IL-3 in cell supernatants and certain body fluids. A control of similarly diluted normal rabbit IgG is recommended.

**Storage Condition**

Store Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated at 4° C prior to restoration. For extended storage aliquot antibody and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated - 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:<a href="http://www.uniprot.org/citations/2556442" target="\_blank">2556442</a>). Stimulates also mature basophils, eosinophils, and monocytes to become functionally activated (PubMed:<a href="http://www.uniprot.org/citations/10779277" target="\_blank">10779277</a>, PubMed:<a href="http://www.uniprot.org/citations/32889153" target="\_blank">32889153</a>). In addition, plays an important role in neural cell proliferation and survival (PubMed:<a href="http://www.uniprot.org/citations/23226269" target="\_blank">23226269</a>). Participates as well in bone homeostasis and inhibits osteoclast differentiation by preventing NF-kappa-B nuclear translocation and activation (PubMed:<a href="http://www.uniprot.org/citations/12816992" target="\_blank">12816992</a>). Mechanistically, exerts its biological effects through a receptor composed of IL3RA subunit and a signal transducing subunit IL3RB (PubMed:<a href="http://www.uniprot.org/citations/29374162" target="\_blank">29374162</a>). 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:<a href="http://www.uniprot.org/citations/27862234" target="\_blank">27862234</a>).

**Cellular Location**

Secreted.

**Tissue Location**

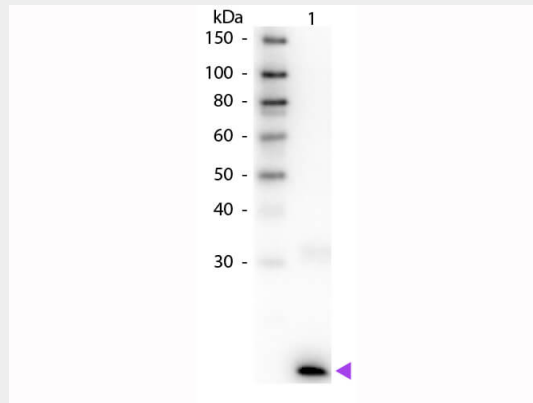
Activated T-cells, mast cells, natural killer cells

**Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated - Images**



Western Blot of Rabbit anti-Human IL-3 Biotin Conjugated Antibody. Lane 1: Human IL-3. Lane 2: None. Load: 50 ng per lane. Primary antibody: Human IL-3 primary antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 15 kDa, 15 kDa for Human IL-3. Other band(s): None.

#### **Anti-Human IL-3 (RABBIT) Antibody Biotin Conjugated - Background**

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.