

**IL-5**  
**Catalog # PVGS1344****Specification**

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**IL-5 - Product Information**

Primary Accession [Q08125](#)  
**Species**  
Rat

**Sequence**  
Met20-Val132

**Purity**  
> 95% as analyzed by SDS-PAGE

**Endotoxin Level**  
< 0.2 EU/ µg of protein by gel clotting method

**Biological Activity**  
ED<sub>50</sub> < 0.5 ng/ml, measured in a proliferation assay using TF-1 Cells.

**Expression System**  
CHO

Formulation **Lyophilized after extensive dialysis against PBS.**

**Reconstitution**  
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH<sub>2</sub>O or PBS up to 100 µg/ml.

**Storage & Stability**  
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

**IL-5 - Additional Information**

**Other Names**  
Interleukin-5, IL-5, B-cell growth factor II, BCGF-II, Cytotoxic T-lymphocyte inducer, Eosinophil differentiation factor, T-cell replacing factor, TRF, IL5, IL-5

**Target Background**  
Interleukin-5 (IL-5), produced by mast cells, T cells and eosinophils, mediates the activities of eosinophil differentiating factor, B cell growth factor II and T cell-replacing factor (TRF). It can increase production and mobilization of eosinophils and CD34+ progenitors from the bone marrow. IL-5 plays an important role in inducing cell-mediated immunity against parasitic infections and certain tumors. IL-5 also promotes differentiation of basophils and primes them for histamine and leukotriene release.

## **IL-5 - Protein Information**

**Name** IL5

**Synonyms** IL-5

### **Function**

Homodimeric cytokine expressed predominantly by T-lymphocytes and NK cells that plays an important role in the survival, differentiation, and chemotaxis of eosinophils (PubMed:<a href="http://www.uniprot.org/citations/10446387" target="\_blank">10446387</a>). Acts also on activated and resting B-cells to induce immunoglobulin production, growth, and differentiation (By similarity). Mechanistically, exerts its biological effects through a receptor composed of IL5RA subunit and the cytokine receptor common subunit beta/CSF2RB. Binding to the receptor leads to activation of various kinases including LYN, SYK and JAK2 and thereby propagates signals through the RAS-MAPK and JAK-STAT5 pathways respectively (By similarity).

### **Cellular Location**

Secreted.

## **IL-5 - 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](#)

## **IL-5 - Images**