

# IL-5

Catalog # PVGS1256

## **Product Information**

Primary Accession Q08125 Species Rat

Sequence Met20-Val132

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

**Endotoxin Level** 

**Expression System** E. coli

**Formulation** Lyophilized after extensive dialysis against 20 mM Tris, pH 8.5.

**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

 $ddH_2O$  up to 100  $\square g/mI$ .

**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.

### **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, is

responsible for the activities attributed to eosinophil differentiating factor,  $\ensuremath{\mathsf{B}}$ 

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.

### **Protein Information**

Name II5

Synonyms II-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:10446387). 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.

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