

# IL-5

Catalog # PVGS1207

## **Product Information**

Primary Accession P05113
Species Human

Sequence Ile20-Ser134

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

> 95% as analyzed by HPLC

**Endotoxin Level** 

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 □g/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.

### **Additional Information**

Gene ID 3567

Other Names Interleukin-5, IL-5, B-cell differentiation factor I, Eosinophil differentiation

factor, T-cell replacing factor, TRF, IL5

**Target Background** Interleukin-5 (IL-5), produced by mast cells, T cells and eosinophils, is

responsible for the activities attributed to 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.

## **Protein Information**

Name IL5

#### **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:2653458, PubMed:9010276). Also acts 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 (PubMed:1495999, PubMed:22528658). 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 (PubMed:7613138).

**Cellular Location** Secreted.

**Tissue Location** Present in peripheral blood mononuclear cells.

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