10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL-5

Catalog # PVGS1227

Specification

IL-5 - Product Information

Primary Accession P04401

Species
Mouse

Sequence
Met21-Gly133

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

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

Biological Activity
ED₅₀ < 2.0 ng/ml, measured by a cell proliferation assay using TF-1 Cells, corresponding to a specific activity of > 5.0 × 10⁵ units/mg.

Expression System
E. coli

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_2O 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

Gene ID 16191

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, 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:10444455, PubMed:1873482). Also acts on activated and resting B-cells to induce immunoglobulin production, growth, and differentiation (PubMed:3128631). 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.

Tissue Location
Expressed in lymphoid cells, including spleen, thymus, lymph nodes and peripheral blood mononuclear cells

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 Cytomety
- Cell Culture

IL-5 - Images