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IL-5

Catalog # PVGS1200

Product Information

Primary Accession	P05113
Species	Human
Sequence	Ile20-Ser134, expressed with an N-terminal Met
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Expression System	E. coli
Formulation	Lyophilized after extensive dialysis against 25 mM Tris, pH 8.0.
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 □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.