

Active GMP Recombinant Human IL5 protein

Cat. No. IL5-4320HG **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL5 was produced in E. coli using non-animal reagents in an animal-free facility under cGMP guidelines.
Species	Human
Source	E.coli
Description	The IL-5 gene is located on chromosome 5 in humans, in close proximity to the genes encoding IL-3, IL-4, and granulocyte-macrophage colony-stimulating factor (GM-CSF), which are often co-expressed in TH2 cells. Through binding to the IL-5 receptor, IL-5 stimulates B cell growth and increases immunoglobulin secretion. It is also a key mediator in eosinophil activation. Interleukin-5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma. IL-5 is a 115-amino acid (in human, 133 in the mouse) -long TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely IL-3 and GM-CSF), this glycoprotein in its active form is a homodimer.
Form	Lyophilized from a 0.2 µ filtered concentrated solution in 20mM PB, pH 7.5, 3 % trehalose, 0.1 % Tween-80.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human TF-1 cells is less than 0.1 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁷ IU/mg.
Molecular Mass	Approximately 26.5 kDa, a disulfide-linked homodimeric protein containing two 116

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	amino acids.
AA Sequence	MIPTEIPTSALVKETLALLSTHRTLIIANETLRIPVPVHKNHQLCTEEIFQGIGTLESQTV QGGTVERLFKNLSLIKIDYGQKKKCGEERRRVNQFLDYLDYFLGVMNTEWIIES
Endotoxin	Less than 1 EU/g of rHuIL-5 as determined by LAL method.
Purity	> 98 % by SDS-PAGE and HPLC analyses.
Storage	This lyophilized preparation is stable at 2-8 centigrade, but should be kept at -20 centigrade for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 centigrade. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 centigrade to -70 centigrade. Avoid repeated freeze/thaw cycles.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 centigrade. Further dilutions should be made in appropriate buffered solutions.
Quality Statement	Our GMP proteins are produced according to relevant sections of the following documents: WHO TRS, No. 822, 1992 Annex 1, Good Manufacturing Practices for Biological Products; USP Chapter 1043, Ancillary Materials for Cell, Gene and Tissue-Engineered Products and USP Chapter 92, Growth Factors and Cytokines Used in Cell Therapy Manufacturing.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

GENE INFORMATION

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene Name	IL5 interleukin 5 (colony-stimulating factor, eosinophil) [Homo sapiens]
Official Symbol	IL5
Synonyms	IL5; interleukin 5 (colony-stimulating factor, eosinophil); interleukin-5; B cell differentiation factor I; EDF; eosinophil differentiation factor; IL 5; interleukin 5; T cell replacing factor; TRF; T-cell replacing factor; B-cell differentiation factor I; IL-5;
Gene ID	3567
mRNA Refseq	NM_000879
Protein Refseq	NP_000870
MIM	147850
UniProt ID	P05113

