

Active Recombinant Human IL3, His-tagged

Cat. No. IL3-8862H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL3 was produced in the endosperm tissue of barley grain (<i>Hordeum vulgare</i>).
Species	Human
Source	Hordeum Vulgare
Description	IL-3 (Interleukin-3, Hematopoietic growth factor, Mast cell growth factor), a pleiotropic growth factor, is mainly produced by activated T-cells, but is also produced by keratinocytes, NK-cells, mast cells, endothelial cells and monocytes. IL-3 promotes proliferation and differentiation of various hematopoietic cell types, including pluripotent stem cells and more committed progenitors. IL-3 also affects activity of mature hematopoietic cells and often functions in combination with other cytokines. Human IL-3 is species-specific and shows no biological activity on murine cells.
Predicted N Terminal	His
Form	Sterile filtered through a 0.2 µm filter. Lyophilized from PBS, pH 7.2
Bio-activity	The bioactivity of recombinant human IL-3 was determined by its dose-dependent effects on the proliferation of TF-1 cells. The ED50 value for this effect is typically < 0.2 ng/ml, corresponding to a specific activity of > 5 x 10 ⁶ units/mg.
Molecular Mass	Recombinant human IL-3 contains 133 amino acids and a 16 a.a. histidine-based tag

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for a total length of 149 a.a. and has a predicted molecular mass of 17.2 kDa. As a result of glycosylation, the recombinant protein migrates with an apparent molecular mass of 20-23 kDa in SDS-PAGE

Endotoxin Endotoxin level is less than 0.05EU/μg as measured by turbidimetric kinetic assay.

Purity >95% by SDS-PAGE gel analysis.

Storage The lyophilized protein is stable at room temperature for few weeks. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.

Reconstitution It is recommended to reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 μg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

GENE INFORMATION

Gene Name IL3 interleukin 3 (colony-stimulating factor, multiple) [Homo sapiens]

Official Symbol IL3

Synonyms IL3; interleukin 3 (colony-stimulating factor, multiple); interleukin-3; hematopoietic growth factor; IL 3; mast cell growth factor; MCGF; MGC79398; MGC79399; MULTI CSF; multilineage colony stimulating factor; P cell stimulating factor; mast-cell growth factor; P-cell stimulating factor; P-cell-stimulating factor; multilineage-colony-stimulating factor; multipotential colony-stimulating factor; IL-3; MULTI-CSF;

Gene ID 3562

mRNA Refseq NM_000588

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Protein Refseq	NP_000579
MIM	147740
UniProt ID	P08700
Chromosome Location	5q23-q31
Pathway	Apoptosis, organism-specific biosystem; Apoptosis, conserved biosystem; Asthma, organism-specific biosystem; Asthma, conserved biosystem; Calcineurin-regulated NFAT-dependent transcription in lymphocytes, organism-specific biosystem; Calcium signaling in the CD4+ TCR pathway, organism-specific biosystem; Cytokine Signaling in Immune system, organism-specific biosystem;
Function	cytokine activity; growth factor activity; interleukin-3 receptor binding;

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