

Recombinant Human Interleukin-3 (rh IL-3)

Synonyms: MCGF (Mast cell growth factor), Multi-CSF, HCGF, P-cell stimulation factor

Introduction: Rh IL-3 is a potent growth promoting cytokine. This cytokine is a species specific colony stimulating factor which stimulates colony formation of megakaryocytes, neutrophils, and macrophages from bone marrow cultures. Produced by T cells, mast cells and eosinophils, IL-3 enhances thrombopoieses, phagocytosis and antibody-mediated cellular cytotoxicity. Its ability to activate monocytes suggests that IL-3 may have additional immunoregulatory roles. Many of the IL-3 activities depend upon co-stimulation with other cytokines. It is involved in a variety of cell activities such as cell growth, differentiation and apoptosis. IL-3 has been also shown to possess neurotrophic activity and may be associated with neurologic disorders.

Description: Recombinant Human IL-3 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 133 amino acids and having a molecular mass of 15 kDa. The rh IL-3 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: lyophilized from a sterile 0.2µm filtrated solution in 50mM NaCl, pH 7.4. The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-3 in sterile H₂O not less than 100 µg/ml which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rh IL-3 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by SDS-PAGE.

Endotoxicity: The endotoxin level is less than 1 EU/µg determined by LAL method

Amino Acid Sequence: APMTQTTPK TSWVNCNMI DEIITHLKQP PLPLDFNNL NGEDQDILME NNLRRPNLEA FNRAVKSLQN ASAIESILKN LLPCLPLATA APTRHPIHIK DGDWNEFRRK LTFYKLTLEN AQAQQTTL SL AIF

Biological Activity: The ED₅₀ as determined by the dose-dependant stimulation of TF-1 cells is < 0.1 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11340032
<i>medium</i>	10 µg	Cat.N°	11340033
<i>large</i>	50 µg	Cat.N°	11340035
<i>x-large</i>	250 µg	Cat.N°	11340037
<i>xx-large</i>	1000 µg	Cat.N°	11340038

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2, 26169 Friesoythe; Germany
 phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com