

Recombinant Rat Interleukin-3 (rr IL-3)

Synonyms: MCGF (Mast cell growth factor), Multi-CSF, HCGF, P-cell stimulation factor, MGC79398, MGC79399.

Introduction: Interleukin-3 is a pleiotropic cytokine produced primarily by activated T cells. IL-3 is thought to function via specific cell surface receptors to stimulate the proliferation, differentiation and survival of haematopoietic cell lines. IL-3 has also been shown to affect the functional activity of a variety of other cell types including mast cells, eosinophils, megakaryocytes and basophils.

Description: Recombinant Rat IL-3 produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 140 amino acids and having a molecular mass of 15783 Dalton. The rr IL-3 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

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

Formulation: Lyophilized from a 1mg/ml solution in water containing 5mM sodium citrate pH 4. The aliquotes of 1 µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

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

Stability: Lyophilized rr IL-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rr 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 98.0% as determined by RP-HPLC and by SDS-PAGE.

Amino Acid Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ser-Asp-Arg-Gly.

Biological Activity: rr IL-3 is fully biologically active when compared to standard. The ED₅₀ as determined by the dose-dependant stimulation of thymidine uptake by murine MC-9 cells is <0.05 ng/ml, corresponding to a specific activity of 1x10⁵ IU/mg.

Endotoxin: Less than 0.1 ng/µg (IEU/µg) of rr IL-3.

This material is offered for **research 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°	13340032
<i>medium</i>	10 µg	Cat.N°	13340033
<i>large</i>	50 µg	Cat.N°	13340035

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