

Recombinant Mouse IL3

Cat No:HR2R2169

For research use only

Overview

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| Quantity | 1.0 ?g |
| Gene Symbol | IL3 |
| Gene ID | 16187 |
| Accession | P01586 |
| Alternative Name | IL-3, Mast cell growth factor, MCGF, Multipotential colony-stimulating factor, Multi-CSF, HCGF, P-cell stimulation factor, Hematopoietic growth factor Recombinant Mouse Interleukin-3 (IL3) |
| Species | Mouse |
| Source | E. coli |
| Description | IL-3 is produced mainly by T cells following cell activation by antigens and mitogens, but also by keratinocytes, natural killer cells, mast cells, endothelial cells, and monocytes. The analysis of bacterial-derived recombinant IL-3 shows that glycosylation is not required for the activity of IL-3. IL-3 sequences are evolutionarily less well conserved. Human and murine IL-3 show approximately 29% homology at the protein level while murine and rat IL-3 show approximately 54% homology. IL-3-alpha and IL-3-beta are two isoforms of rat IL-3. IL-3 receptors are expressed on macrophages, mast cells, eosinophils, megakaryocytes, basophils, bone marrow progenitor cells, and various myeloid leukemia cells. IL-3/receptor complexes have a Kdis of 10 ⁻⁹ - 10 ⁻¹⁰ M. Binding of IL-3 to its receptor causes specific phosphorylation of a 150 kDa membrane glycoprotein. |
| Functions | The ED(50) was determined by the dose-dependent stimulation of the proliferation of mouse M-NFS-60 cells was found to be in the <math>0.05 \text{ ng/mL}</math>. |
| Formulation | Recombinant mouse Interleukin-3 was lyophilized from a 0.2 ?m filtered PBS solution. |
| Solubility | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers. |
| Appearance | Lyophilized Powder |
| Molecular Weight | 15 |
| Purity | >95% as determined by SDS-PAGE |
| Concentration | <math><1.0 \text{ EU/?g}</math> of recombinant protein as determined by the LAL method. |
| Shipping Condition | Ambient Temperature |
| Storage Condition | The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles. |