



Mouse Interleukin 3 (DAG306)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Recombinant Mouse IL3 is a single non-glycosylated polypeptide chain containing 135 amino acids and having a molecular weight of 15,100 Da, was expressed in E. coli. The sequence of the first five N-terminal amino acids was determined to be Met-Asp-Thr-His-Arg.
Antigen Description	Interleukin-3 (IL-3) is an interleukin, a type of biological signal (cytokine) that can improve the body's natural response to disease as part of the immune system. It acts by binding to the interleukin-3 receptor. IL-3 stimulates the differentiation of multipotent hematopoietic stem cells into myeloid progenitor cells (as opposed to lymphoid progenitor cells where differentiation is stimulated by IL-7) as well as stimulates proliferation of all cells in the myeloid lineage (erythrocytes, megakaryocytes, granulocytes, monocytes, and dendritic cells). It is secreted by basophils and activated T cells to support growth and differentiation of T cells from the bone marrow in an immune response. The human IL-3 gene encodes a protein 152 amino acids long, and the naturally occurring IL-3 is glycosylated. The human IL-3 gene is located on chromosome 5, only 9 kilobases from the GM-CSF gene, and its function is quite similar to GM-CSF.
Species	Mouse
Conjugate	Unconjugated
Applications	The ED ₅₀ as determined by the dose-dependent stimulation of mouse M-NFS-60 cells is and is 0.05 ng/ml, corresponding to a specific activity of 2 x 10 ⁷ IU/mg. Each laboratory should determine an optimum working titer for use in its particular application. Other
Format	Purified, Lyophilized. Reconstitute using sterile deionized water to a concentration 100 µg/ml. Further dilutions can be made in other aqueous buffers.
Concentration	1 mg/ml (OD _{280nm} , E _{0.1%} = 0.154) (prior to lyophilization)
Buffer	Lyophilized from water containing no additives
Preservative	None

BACKGROUND

Introduction	Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. This CSF induces granulocytes, macrophages, mast cells, stem cells, erythroid cells, eosinophils and megakaryocytes.
Keywords	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 f