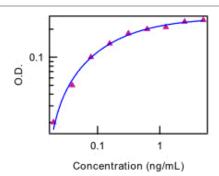


Human IL-3 Recombinant Protein Carrier-Free

Catalog Number: 34-8039 Also Known As:Interleukin-3, IL3

RUO: For Research Use Only. Not for use in diagnostic procedures.



Proliferation of the TF-1 cell line in response to Human IL-3 Recombinant Protein Carrier-Free

Product Information

Contents: Human IL-3 Recombinant Protein Carrier-Free

REF Catalog Number: 34-8039

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in sterile environment.

Source: E. coli expressed mature human IL-3 (accession

#NM_000588).

Molecular Mass: 15 kDa

Purity: Greater than 95%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.01 ng/ug cytokine as determined

by the LAL assay.

Bioactivity: The $\rm ED_{50}$ measured in a TF-1 proliferation assay is typically less than 0.15 ng/ml, corresponding to a specific

activity of greater than 7x10⁶ Units/mg.

Formulation: Sterile liquid: 20mM phosphate buffer, 0.15M NaCl, pH 7.0, 0.22 μm filtered.

Temperature Limitation: Store at less than or equal to -70°C.

Batch Code: Refer to Vial
Use By: Refer to Vial

Description

Interleukin 3 (IL-3), also called Mast Cell Growth Factor (MCGF), Multi-Colony Stimulating Factor (multi-CSF), Eosinophil-CSF (E-CSF), is produced by activated T cells, mast cells and eosinophils. IL-3 is a hematopoietic growth factor that stimulates colony formation of erythroid, megakaryocyte, neutrophil, eosinophil, basophil, mast cell and monocytic lineages. Most of these functions are enhanced or dependent on costimulation with other cytokines. Human and mouse IL-3 share only 29% sequence identity at the amino acid level. The bioactivity of IL-3 is highly species specific. Human IL-3 has no activity on mouse cells.

Applications Reported

Recombinant human IL-3 is biologically active.

Applications Tested

This recombinant human IL-3 has been tested by bioassays using the TF-1 cell line. The ED_{50} measured in a TF-1 proliferation assay is typically less than 0.15 ng/ml, corresponding to a specific activity of greater than $7x10^6$ Units/mg.

References

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Donahue RE, Seehra J, Metzger M, Lefebvre D, Rock B, Carbone S, Nathan DG, Garnick M, Sehgal PK, Laston D. Human IL-3 and GM-CSF act synergistically in stimulating hematopoiesis in primates. Science. 1988 Sep 30;241(4874):1820-3.

Yang YC, Ciarletta AB, Temple PA, Chung MP, Kovacic S, Witek-Giannotti JS, Leary AC, Kriz R, Donahue RE, Wong GG. Human IL-3 (multi-CSF): identification by expression cloning of a novel hematopoietic growth factor related to murine IL-3. Cell. 1986 Oct 10;47(1):3-10.

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