

Recombinant Dog Interleukin 3 (colony-stimulating factor, multiple)

Cat. No. IL3-362D Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Dog Interleukin-3 (IL-3) is a single non-glycosylated polypeptide chain containing 120 amino acids.
Species	Dog
Source	E.coli
Description	IL-3 is a hematopoietic growth factor that promotes the survival, differentiation and proliferation of committed progenitor cells of the megakaryocyte, granulocyte-macrophage, erythroid, eosinophil, basophil and mast cell lineages. Produced by T cells, mast cells and eosinophils, IL-3 enhances thrombopoiesis, phagocytosis, and antibody-mediated cellular cytotoxicity. Its ability to activate monocytes suggests that IL-3 may have an additional immunoregulatory role. Many of the IL-3 activities depend upon costimulation with other cytokines. IL-3 is a species-specific, variably glycosylated cytokine.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Molecular Weight	14.0 kDa
Purity	>97% by SDS-PAGE and HPLC analyses
Endotoxin Level	<0.1 ng/µg of protein
Biological Activity	The ED ₅₀ as determined by the dose-dependent stimulation of the proliferation of

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	humanTF-1 cells is less than 0.2 ng/ml, corresponding to a specific activity of 5.0×10^6 IU/mg.
Reconstitution	Centrifuge vial prior to opening. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be divided into working aliquots and stored at -80°C. Further dilutions should be made in appropriate buffered solutions.
Amino Acid Sequence	RPFSTDLPKQFTMINEIMEMLNKSPSPSE EPLDSNEKET LLEDTLRPN LDVFLNASSK FHKNGLLIWN NLKEFLPLLP TPTPRGEPISIMENNWGDFQ RKLKKYLEALDNFLNFKNKP
Storage	The lyophilized protein is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. After reconstitution, the protein is stable for 1 week at 2-4°C. For long term storage, aliquot and freeze at -80°C. Avoid repeated freeze-thaw cycles.
Official Symbol	IL3

GENE INFORMATION

Gene Name	IL3 interleukin 3 (colony-stimulating factor, multiple) [<i>Canis lupus familiaris</i>]
Synonyms	IL3; interleukin 3 (colony-stimulating factor, multiple); IL-3; MCGF; interleukin-3; mast cell growth factor; P-cell-stimulating factor; hematopoietic growth factor; multipotential colony-stimulating factor
Gene ID	481497
mRNA Refseq	NM_001013835
Protein Refseq	NP_001013857

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UniProt ID

Q9BDX4

Pathway

Apoptosis; Asthma; Cytokine Signaling in Immune system; Cytokine-cytokine receptor interaction; Fc epsilon RI signaling pathway; Hematopoietic cell lineage; Immune System; Interleukin receptor SHC signaling; Interleukin-2 signaling; Interleukin-3, 5 and GM-CSF signaling; Jak-STAT signaling pathway; Signaling by Interleukins

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