

GMP Recombinant Human IL6

Cat. No. IL6-96H Lot. No. (See product label)

SPECIFICATION

Product Overview

Species Human

Source E.coli

Description

Interleukin-6 (IL-6) is a multifunctional protein that plays important roles in host defense, acute phase reactions, immune responses, and hematopoiesis. According to the type of biological responses being studied, IL-6 was previously named interferon- β 2, 26 kDa protein, B cell stimulatory factor-2 (BSF-2), hybridoma/plasmacytoma growth factor, hepatocyte stimulating factor, cytotoxic T cell differentiation factor, and macrophage-granulocyte inducing factor 2A (MGI-2A). The IL-6 designation was adopted after these variously named proteins were found to be identical on the basis of their amino acid and/or nucleotide sequences. IL-6 is expressed by a variety of normal and transformed cells including T cells, B cells, monocytes/macrophages, fibroblasts, hepatocytes, keratinocytes, astrocytes, vascular endothelial cells, and various tumor cells. The production of IL-6 is upregulated by numerous signals including mitogenic or antigenic stimulation, LPS, calcium ionophore, IL-1, IL-2, IFN, TNF, PDGF, and viruses. IL-6 expression in monocytes is inhibited by IL-4 and IL-13.

Form Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.

Bio-activity

The ED50 determined by a cell proliferation assay using IL-6-dependent murine 7TD1 cells is less than 0.1 ng/mL, corresponding to a specific activity of $>1.0 \times 10^7$ IU/mg.

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Molecular Mass	Approximately 20.7 kDa, a single non-glycosylated polypeptide chain containing 183 amino acids.
AA Sequence	VPPGEDSKDV AAPHRQPLTS SERIDKQIRY ILDGISALRK ETCNKSNMCE SSKEALAENN LNLPKMAEKD GCFQSGFNEE TCLVKIITGL LEFEVYLEYL QNRFESSEEQ ARAVQMSTKV LIQFLQKKAK NLDAITTPDP TTNASLLTKL QAQNQWLQDM TTHLILRSFK EFLQSSLRAL RQM
Endotoxin	Less than 1 EU/μg of IL-6 as determined by LAL method.
Purity	>96% by SDS-PAGE and HPLC analyses.
Usage	This material is offered by Creative Biomart for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.
Storage Buffer	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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 apportioned into working aliquots and stored at< -20°C.="" further="" dilutions="" should="" be="" made="" in="" appropriate="" buffered="">

GENE INFORMATION

Gene Name	IL6 interleukin 6 (interferon, beta 2) [Homo sapiens]
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Official Symbol	IL6
Synonyms	IL6; interleukin 6 (interferon, beta 2); IFNB2; interleukin-6; BSF2; HGF; HSF; IL 6; CDF; BSF-2; IFN-beta-2; interferon beta-2; interleukin BSF-2; hybridoma growth factor; CTL differentiation factor; B-cell stimulatory factor 2; B-cell differentiation factor; IL-6;
Gene ID	3569
mRNA Refseq	NM_000600
Protein Refseq	NP_000591
MIM	147620
UniProt ID	P05231
Chromosome Location	7p21-p15
Pathway	ATF-2 transcription factor network, organism-specific biosystem; Adipogenesis, organism-specific biosystem; African trypanosomiasis, organism-specific biosystem; African trypanosomiasis, conserved biosystem; Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem;
Function	cytokine activity; cytokine activity; growth factor activity; interleukin-6 receptor binding; contributes_to interleukin-6 receptor binding; interleukin-6 receptor binding;

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