Active Recombinant Human Interleukin 6 (Interferon, Beta 2)

Cat. No. IL6-128H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human interleukin 6 (interferon, beta 2) protein sequence (containing the signal peptide sequence, and the mature human Interleukin 4 sequence) and was expressed in modified*human 293 cells*.
Species	Human
Source	HEK293
Description	IL-6 is a pleotropic cytokine that regulates the development, proliferation and maturation of a number of hematopoietic cells and is essential for the maturation of B cells into immunoglobulin-secreting cells.
Amino Acid Sequence	APVPPGEDSKDVAA PHRQPLTSSER IDKQIRYILDG ISALRKETCN KSNMCESSK EALAENNLN LPKMAEKDGCFQSGFNEETCLVKIITGLLEFEVY LEYLQNRFE SSE E QARAV QMST KVLIQFL QKKAKN LDAITTPDPTT NASLLTKLQA QNQWLQDMT T HLI L RSFK EFLQSSLRALRQM.
Molecular Mass	IL-6 migrates as a broad band between 20 and 25 kDa in SDS-PAGE due to post-translation modifications, in particular glycosylation. This compares with the unmodified IL-6 that has a predicted molecular mass of 21.0kDa.
PI	IL-6 separates into a number of isoforms with a pI between 5.5 and 7.2 in 2D PAGE due to post-translational modifications, in particular glycosylation. This compares with the unmodified IL-6 that has a predicted pI of 6.22.

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% Carbohydrate	Purified IL-6 consists of 0-20% carbohydrate by weight.
Purity	>95%, as determined by SDS-PAGE and visualized by silver stain.
Formulation	When reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.
Storage	Lyophilized products should be stored at 2 to 8°C. Following reconstitution short-term storage at 4°C is recommended, and longer-term storage of aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.
Activity	The $ED_{50}$of IL-6 is typically 0.15 - 0.35 ng/ml as measured in a cell proliferation assay using a human growth factor-dependent TF-1 cell line.

GENE INFORMATION

Gene Name	IL6 interleukin 6 (interferon, beta 2) [Homo sapiens]
Synonyms	IL6; interleukin 6 (interferon, beta 2); BSF2; HGF; HSF; IFNB2; IL-6; B cell stimulatory factor-2; B-cell differentiation factor; CTL differentiation factor; OTTHUMP00000158544; hybridoma growth factor; interleukin 6; interleukin BSF-2; (interferon, beta 2); Hybridoma growth factor
Gene ID	3569
mRNA Refseq	NM_000600
Protein Refseq	NP_000591

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MIM	147620
UniProt ID	P05231
Chromosome Location	7p21
Pathway	Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Hematopoietic cell lineage; Graft-versus-host disease; Hypertrophic cardiomyopathy (HCM); Pathways in cancer; Prion diseases; Toll-like receptor signaling pathway
Function	interleukin-6 receptor activity; cytokine activity; growth factor activity
PDB rendering based on 1ALU.	

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