

Active Recombinant Human IL6

Cat. No. IL6-106H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human recombinant protein expressed in <i>Nicotiana benthamiana</i> .
Species	Human
Source	<i>Nicotiana Benthamiana</i>
Description	This gene encodes a cytokine that functions in inflammation and the maturation of B cells. In addition, the encoded protein has been shown to be an endogenous pyrogen capable of inducing fever in people with autoimmune diseases or infections. The protein is primarily produced at sites of acute and chronic inflammation, where it is secreted into the serum and induces a transcriptional inflammatory response through interleukin 6 receptor, alpha. The functioning of this gene is implicated in a wide variety of inflammation-associated disease states, including susceptibility to diabetes mellitus and systemic juvenile rheumatoid arthritis.
Form	Recombinant human IL-6 is lyophilized from Tris HCl 20 mM buffer pH 8.5 and 125mM NaCl.
Bio-activity	The specific activity is determined by the dose-dependent stimulation of the proliferation of human TF-1 cells (human erytroleukemic indicator cell line). ED50 < 1 ng/ml
Molecular Mass	rhuman Interleukin-6 is a polypeptide chain containing 183 amino acids (30 – 212 of P05231 IL6_HUMAN) and 10 aa Histidine-based tag. It as a predicted molecular mass of 22.2 kDa, however as result of potential glycosilation, the recombinant

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	protein could migrate with an apparent molecular mass of 23-24 kDa in SDS-PAGE gel.
AA Sequence	HHHHHHHHHHVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRKETCNKSN MCESSKEALAENNLNLPK MAEKDGCFCQSGFNEETCLVKIITGLLEFEVYLEYLQNR ESSEEQARAVQMSTKVLIQFLQKKAKNLDAITTPDP TTNASLLTKLQAQNQWLQDM TTHLILRSFKEFLQSSLRALRQM
Purity	The protein was resolved by SDS polyacrylamide gel electrophoresis and the gel was stained with coomassie blue.
Applications	Cell culture, Western Blot. Upon this protein has not been tested in a particular technique this not necessarily excludes its use in such procedures. For R+D purposes only. Purchaser must determine the suitability of the product for their particular use.
Storage	This lyophilized preparation is stable at 2-8° C for short term, long storage it should be kept at -20°C. Reconstituted protein should be stored in working aliquots at –20°C. Repeated freezing and thawing is not recommended.
Reconstitution	Lyophilized protein should be reconstituted in water following instructions of batch Quality Control sheet. At higher concentration the solubility may be reduced and multimers generated. Optimal concentration should be determined for specific application and cell lines.

GENE INFORMATION

Gene Name	IL6 interleukin 6 (interferon, beta 2) [Homo sapiens]
Official Symbol	IL6
Synonyms	IL6; interleukin 6 (interferon, beta 2); IFNB2; interleukin-6; BSF2; HGF; HSF; IL 6;

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	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;