

Recombinant Human Interleukin-6

Human, Recombinant (IL6)

Expressed in *E. coli*

Cat. No. CRP0803

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Interleukin (IL)-6 is an important proinflammatory and immunoregulatory cytokine expressed by various cells. Interleukin-6 has been shown to inhibit the growth of early stage and to promote the proliferation of advanced stage melanoma cells in vitro.

Amino-Acid Sequence: 185 aa (The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Pro-Val-Pro-Pro.) non-glycosylated

M. W. : 21,000 Da

Recombinant: Expressed in *E. coli*

Purity: >98% as determined by SDS-PAGE, FPLC and RP-HPLC.

Formulation: Lyophilized from a concentrated (1mg/ml) solution in water containing 43µg/ml sodium chloride.

Specific Activity: rHuIL-6 is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of human TF-1 cells is less than 0.1 ng/ml, corresponding to a Specific Activity of 5.0×10^7 IU/mg.

Endotoxin: Less than 0.3ng/µg (0.3IEU/µg) determined by LAL test.

Reconstitution: It is recommended to reconstitute the lyophilized rHuIL-6 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage: Lyophilized rHuIL-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuIL-6 should be stored at 4°C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Aliquot to avoid repeated freeze-thaw cycles.



[PDB](#) rendering based on 1ALU.

GENE INFORMATION

Gene Name: [IL6](#)

Synonyms: HGF; BSF2; HSF; IFNB2; IL-6; CDF; BSF-2; B-cell stimulatory factor 2; CTL differentiation factor; Hybridoma growth factor; Interferon beta-2; Interferon beta 2; Interferon β 2; Interleukin-6 precursor; interleukin 6 (interferon, beta 2)

mRNA Refseq: [NM_000600.2](#)

Protein Refseq: [NP_000591.1](#)

MIM: [147620](#)

GeneID: [3569](#)

UniProt ID: P05231

Chromosome Location: 7p21

Pathway: Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling pathway, Prion disease, Toll-like receptor signaling pathway

Function: cytokine activity, interleukin-6 receptor binding, protein binding

REFERENCES

1. van der Poll T, Keogh CV, Guirao X, Buurman WA, Kopf M, Lowry SF (1997). Interleukin-6 gene-deficient mice show impaired defense against pneumococcal pneumonia. *J Infect Dis* 176 (2): 439-444.
2. Febbraio MA, Pedersen BK (2005). Contraction-induced myokine production and release: is skeletal muscle an endocrine organ?. *Exerc Sport Sci Rev* 33 (3): 114-119.

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