

## Interleukin-6

### Human, Recombinant (rHuIL-6)

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.

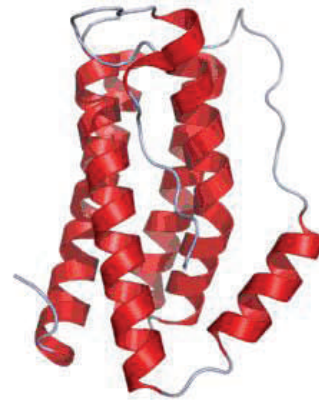
**Specific Activity:** rHuIL-6 is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of human TF-1 cells is less than 0.1 ng/ml, corresponding to a Specific Activity of  $5.0 \times 10^7$  IU/mg.

**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 H<sub>2</sub>O 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.

#### FOR RESEARCH USE ONLY



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

#### GENE INFORMATION

**Gene Name:** [IL6](#)

**Gene Alias:** HGF; BSF2; HSF; IFNB2; IL-6

**Gene Type:** protein coding

**mRNA Refseq:** [NM\\_000600.2](#)

**Protein Refseq:** [NP\\_000591.1](#)

**MIM:** [147620](#)

**GeneID:** [3569](#)

**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

- 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.
- 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.
- Kishimoto T, Akira S, Narazaki M, Taga T (1995). Interleukin-6 family of cytokines and gp130. *Blood* 86: 1243-1254.