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# Recombinant Human Interleukin 6 (IL-6)

Catalog No.	Size	Species	Protein Accession No.
230-00011	10, 50, 100 µg	Human	AAH15511

## Synonyms

Interleukin 6, interferon, beta 2, IL-6, HSF, HGF, BSF2, IFNB2, hybridoma growth factor, CTL differentiation factor, BSF-2, CDF, B-cell stimulatory factor 2.

## Description

**Interleukin-6** (IL-6) is an interleukin, secreted by T cells and macrophages to stimulate immune response to trauma. IL-6 is an anti-inflammatory cytokine mediating through its inhibitory effects on IL-1 and TNF-alpha, and its activation of IL10 and IL-1ra. Interleukin 6 interacts with IL-6 receptor and glycoprotein 130. IL-6 mediates fever and the acute phase response, and involves in many disease processes, such as prostate cancer, depression, atherosclerosis, diabetes, and rheumatoid arthritis. Metastatic cancer patients have higher blood IL-6.

## Preparation

The human *IL-6* (**Ala28 - Met212**) gene without signal peptide coding sequence was cloned and expressed in *Escherichia coli*. The recombinant protein has an N-terminal 6×histidine tag and was purified by immobilized metal ion affinity chromatography (IMAC).

## Source

Recombinant histidine-tagged protein, purified from *E. coli*.

## Predicted Molecular Mass

~23 kDa with the 6×histidine tag.

## Formulation

- Fine white powder, lyophilized.
- Recombinant IL-6 constituted in a 0.2 µm filtered phosphate-buffered saline (PBS) before lyophilized. It is recommended to briefly spin the vial prior to opening to bring the contents to the bottom, and reconstitute the lyophilized product with sterile 18

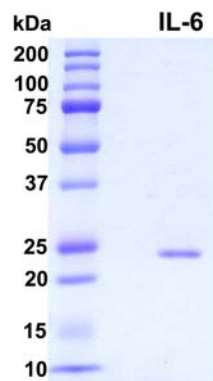
MΩ-cm deionized water or your desired buffer to a concentration of 0.1-1.0 mg/mL.

## Stability & Storage

- Lyophilized product is stable at room temperature for 3 weeks, it is recommended to be stored desiccated below -20°C in a manual defrost freezer.
- Upon reconstituted, the protein should be stored at 4°C for one week. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA) and store at -20 or -80°C. **Please avoid repeated freeze-thaw cycles.**

## Purity

>95%, determined by SDS-PAGE and stained with Coomassie blue (see image below).



## References

- van der Poll T, et al. (1997). Interleukin-6 gene-deficient mice show impaired defense against pneumococcal pneumonia. *J Infect Dis* **176** (2): 439-44.
- Kishimoto T, et al. (1995). Interleukin-6 family of cytokines and gp130. *Blood* **86** (4): 1243-1254.
- Heinrich PC, et al. (2003). Principles of interleukin-6-type cytokine signalling and its regulation. *Biochem. J.* **374** (Pt 1): 1-20.
- Taga T, et al. Interleukin-6 triggers the association of its receptor with a possible signal transducer, gp130. *Cell* **58** (3): 573-81.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**