



## IL 6 Human

### Synonyms:

IFN- $\beta$ 2, B cell differentiation factor, BCDF, BSF-2, HPGF, HSF, MGI-2, B-cell stimulatory factor 2, Interferon beta-2, Hybridoma growth factor, CTL differentiation factor, CDF, IL-6, HGF.

### Introduction:

IL-6 is a cytokine with a wide variety of biological functions: it plays an essential role in the final differentiation of b-cells into ig-secreting cells, it induces myeloma and plasmacytoma growth, it induces nerve cells differentiation, in hepatocytes it induces acute phase reactants.

### Description:

Interleukin-6 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 184 amino acids and having a molecular mass of 21000 Dalton. The IL6 is purified by proprietary chromatographic techniques.

### Source:

*Escherichia Coli.*

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized from a 0.2  $\mu$  m filtered concentrated (1mg/ml) solution in PBS, pH 7.4.

#### Solubility:

It is recommended to reconstitute the lyophilized Interleukin-6 in sterile 18M -cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

#### Stability:

Lyophilized Interleukin-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18 ° C. Upon reconstitution IL6 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).

**Please prevent freeze-thaw cycles.**

#### Purity:

Greater than 97.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

#### Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Pro-Val-Pro-Pro.

#### Biological Activity:

The ED<sub>50</sub> as determined by the dose-dependant stimulation of murine 7TD1 cells is less than 0.1 ng/ml, corresponding to the specific activity of 1.0 x 10<sup>7</sup> Units per mg.

#### Protein content:

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.47 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a standard solution of IL-6 as a Reference Standard.

Usage:

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