

## Recombinant Human Interleukin 6 (rh IL-6)

**Synonyms:** B cell differentiation factor (BCDF), HSF, MGI-2, B-cell stimulatory factor 2 (BSF-2), Hybridoma growth factor (HPGF), CTL differentiation factor (CDF)

**Introduction:** IL-6 is a pleiotropic cytokine that plays important roles in acute phase reaction, antigen specific immune responses and hematopoiesis. Main sources of Interleukin-6 are monocytes, T-cells, fibroblasts and endothelial cells. IL-6 is a major mediator of acute phase reaction, it functions as B-cell differentiation factor (BCDF) and induces the proliferation of thymocytes. Moreover it has neurotrophic activity on certain neuronal cell types. IL-6 is also known to act as autocrine growth modulator of some tumor types.

**Description:** Recombinant human IL-6 produced in *E.Coli* is a variably glycosylated polypeptide chain containing 185 amino acids with alpha-helical structure and having a molecular mass of 21 kDa. The rh IL-6 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilised from a 0.22 µm filtered carrier free solution in PBS pH 7.5 containing 0.25 M NaCl. The aliquots of 1µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh IL-6 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh IL-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh IL-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). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Endotoxicity:** The endotoxin level is less than 1 EU/µg determined by LAL method

**Amino acid sequence:**

MPVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRKETCNKSNMCESSKEALAENNLNLPKMAEKDGC  
FQSGFNEETCLVKIITGLLEFEVYLEYLQNRFSSEEQARAVQMSTKVLIQFLQKKAKNLDAITTPDPTTNASLLTK  
LQAQNQWLQDMTTHLILRSFKEFLQSSLRALRQM

**Biological Activity:** The ED<sub>50</sub> as determined by the dose-dependant stimulation of murine 7TD1 cells is < 0.1 ng/ml, corresponding to a specific activity of > 0.5x 10<sup>8</sup> IU/mg.

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<i>small</i>	5 µg	Cat.N°	11340060
<i>medium</i>	20 µg	Cat.N°	11340064
<i>large</i>	100 µg	Cat.N°	11340066
<i>x-large</i>	500 µg	Cat.N°	11340067
<i>xx-large</i>	1000 µg	Cat.N°	11340068

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