

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 H₂O 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:

MPVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGIALRKETCNKSNMCESSKEALAENNLNLPKMAEKDGC
FQSGFNEETCLVKIITGLLEFEVYLEYLQNRFESEEQARAVQMSTKVLIQFLQKKAKNLDAITTPDPTTNASLLTK
LQAQNQWLQDMTTHLILRSFKEFLQSSLRALRQM

Biological Activity: The ED₅₀ as determined by the dose-dependant stimulation of murine 7TD1 cells is < 0.1 ng/ml, corresponding to a specific activity of > 0.5x 10⁸ IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<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

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com