

## Recombinant Rat Interleukin-6 (rr IL-6)

**Synonyms:** IFN-beta2, B cell differentiation factor (BCDF), BSF-2, HPGF, HSF, MGI-2, 26kDa protein

**Introduction:** Interleukin-6 is a potent pro-inflammatory cytokine primarily produced by activated T cells and a assortment of other cells including endothelial cells and macrophages. IL-6 affects B and T lymphocytes and has been shown to have a role in host defense, acute phase reactions, immune responses and hematopoiesis.

**Description:** Recombinant rat IL-6 produced in *E. Coli* is a single, non-glycosylated, polypeptide chain containing 187 amino acids and having a molecular mass of 21.7 kDa. The rr IL-6 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

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

**Formulation:** The protein was lyophilized from a 0.22 µm filtered solution in 25 mM Tris, 250 mM NaCl, pH 8.0. The aliquotes of 1 µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rr 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 rr IL-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rr 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:**

MFPTSQVRRG DFTEDTTHNR PVYTTTSQVGG LITYVLREIL EMRKELCNGN SDCMNSDDAL SENNLKLPEI  
QRNDGCFQTG YNQEICLLKI CSGLLEFRFY LEFVKNNLQD NKKDKARVIQ  
SNTETLVHIF KQEIKDSYKI VLPTPTSNAL LMEKLESQKE WLRTKTIQLI LKALEEFLKV TMRSTRQT

**Biological Activity:** The ED<sub>50</sub> = 0.03 – 0.1 ng/ml. The biological activity is determined by measuring the dose-dependant proliferation of IL-6 dependant B9 cells. A concentration range of 0.1 to 10.0 ng/ml is effective for most in vitro applications.

This material is offered for **research 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>	2 µg	Cat.N°	13340062
<i>medium</i>	10 µg	Cat.N°	13340063
<i>large</i>	50 µg	Cat.N°	13340065
<i>x-large</i>	250 µg	Cat.N°	13340067
<i>x-large</i>	1000µg	Cat.N°	13340068

**ImmunoTools** Excellent Quality - Advantageously priced

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