

## Recombinant Murine Interleukin-6 (rm IL-6)

**Synonymes:** IFN- $\beta$ 2, B cell differentiation factor (BCDF), BSF-2, HPGF, HSF, MGI-2, Interleukin HP-1, B-cell hybridoma growth factor.

**Introduction:** IL-6 is a potent pro-inflammatory cytokine primarily produced by activated T-cells and an 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 murine 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 rm IL-6 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

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

**Formulation:** Lyophilized from a 0.22  $\mu$ m filtered carrier free solution in PBS pH 7.5 containing 0.25 M NaCl. The aliquots of 1 $\mu$ g and 2 $\mu$ g contain Trehalose 5% (w/vol) for better recovery.

**Solubility:** It is recommended to reconstitute the lyophilized rm IL-6 in steril H<sub>2</sub>O not less than 100 $\mu$ g/ml which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm IL-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm 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.

**Amino Acid Sequence:** MFPTSQVRRG DFTEDTTPNR PVYTTSQVGG LITHVLWEIV EMRKELCNGN  
SDCMNDDAL AENNLKPEI QRNDGCYQTG YNQEICLLKI SSSLLEYHSY LEYMKNNLKD  
NKKDKARVLQ RDTETLIHIF NQEVKDLHKI VLPTPISNAL LTKLESQKE WLRTKTIQFI LKSLEEFKLV  
TLRSTRQT

**Endotoxicity:** The endotoxin level is less than 0.1 ng per  $\mu$ g (1EU/ $\mu$ g) determined by LAL method.

**Biological Activity:** The ED<sub>50</sub> as determined by its growth promoting effect on 7TD1 cells is < 0.02 ng/ml, corresponding to a specific activity of 5.0 x 10<sup>7</sup> IU/mg.

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|                 |              |        |          |
|-----------------|--------------|--------|----------|
| <i>small</i>    | 2 $\mu$ g    | Cat.N° | 12340062 |
| <i>medium</i>   | 10 $\mu$ g   | Cat.N° | 12340063 |
| <i>large</i>    | 50 $\mu$ g   | Cat.N° | 12340065 |
| <i>x-large</i>  | 250 $\mu$ g  | Cat.N° | 12340067 |
| <i>xx-large</i> | 1000 $\mu$ g | Cat.N° | 12340068 |

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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)