



## IL-6 Recombinant Protein

CATALOG NUMBER: 40-112

### Specifications

<b>SPECIES:</b>	Murine
<b>SOURCE SPECIES:</b>	E. coli
<b>SEQUENCE:</b>	MFPTSQVRRG DFTEDTTPNR PVYTTSQVGG LITHVLWEIV EMRKELCNGN SDCMNNDDAL AENNLKLP EI QRNDGCYQTG YNQEICLLKI SSSLLEYHSY LEYMKNNLKD NKKDKARVLQ RDTETLIHIF NQEVKDLH KI VLPTPISNAL LTDKLESQKE WLRRTKIQFI LKSLEEFKLV TLRSTRQT
<b>TESTED APPLICATIONS:</b>	
<b>BIOLOGICAL ACTIVITY:</b>	The ED50 was determined by the dose - dependent stimulation of the proliferation of IL - 6 - dependent murine 7TD1 cells is < 0.02 ng/mL, corresponding to a specific activity of > 5 x 10 <sup>7</sup> units/mg.

### Properties

<b>PURITY:</b>	Greater than 98% by SDS-PAGE gel and HPLC analyses.  Endotoxin level is less than 0.1 ng per ug (1EU/ug).
<b>PHYSICAL STATE:</b>	Lyophilized
<b>STORAGE CONDITIONS:</b>	The lyophilized IL-6 recombinant protein is stable for at least 2 years from date of receipt at -20°C. Reconstituted IL-6 is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. As with any protein, exposing IL-6 recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

### Additional Info

<b>ALTERNATE NAMES:</b>	Il-6, Il-6, Interleukin-6, B-cell hybridoma growth factor, IL-6
<b>ACCESSION NO.:</b>	NP_112445.1
<b>PROTEIN GI NO.:</b>	13624311

### Background

IL-6 is a pleiotropic cytokine that plays an important role in host defense by regulating immune and inflammatory responses. Produced by T cells, monocytes, fibroblasts, endothelial cells and keratinocytes, IL-6 has diverse biological functions. It stimulates B-cell differentiation and antibody production, synergizes with IL-3 in megakaryocyte development and platelet production, induces expression of hepatic acute-phase proteins, and regulates bone metabolism. IL-6 signals through the IL-6 receptor system that consists of two chains, IL-6R alpha and gp130. Murine IL-6 is inactive on human cells, while both human and murine are equally active on murine cells. Recombinant murine IL-6 is a 21.7 kDa protein containing 187 amino acid residues.

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