



IL-6 Recombinant Protein

CATALOG NUMBER: 40-466

Specifications

SPECIES:	Rat
SOURCE SPECIES:	E. coli
SEQUENCE:	MFPTSQVRRG DFTEDTTHNR PVYTTSQVGG LITYVLR EIF EMRKELCNGN SDCMNSDDAL SENNLKLP EI QRNDGCFQTG YNQEICLLKI CSGLLEFRFY LEFVKNNLQD NKKDKARVIQ SNTETLVHIF KQEIKDSYKI VLPTPTSNA LMEKLESQKE WLRTKTIQLI LKALEEFLKV TMRSTRQT
TESTED APPLICATIONS:	
BIOLOGICAL ACTIVITY:	The ED50 was determined by the dose - dependent stimulation of the proliferation of IL - 6 - dependent murine 7TD1 cells is < 0.01 ng/mL, corresponding to a specific activity of > 1 x 10 ⁸ units/mg.

Properties

PURITY:	Greater than 98% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than 0.1 ng per ug (1EU/ug).
PHYSICAL STATE:	Lyophilized
STORAGE CONDITIONS:	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

ALTERNATE NAMES:	ILg6, Ifnb2, Il-6, Interleukin-6, IL-6
ACCESSION NO.:	NP_036721.1
PROTEIN GI NO.:	7549769

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 rat IL-6 is a 21.7 kDa protein containing 187 amino acid residues.

FOR RESEARCH USE ONLY