



IL-6 Recombinant Protein

CATALOG NUMBER: 40-523

Specifications

SPECIES:	Human
SOURCE SPECIES:	E. coli
SEQUENCE:	PVPPGEDSKD VAAPHRQPLT SSERIDKQIR YILDGISALR KETCNKSNMC ESSKEALAEN NLNLPKMAEK DGCFQSGFNE ETCLVKIITG LLEFEVYLEY LQNRFSSEE QARAVQMSTK VLIQFLQKKA KNLDAITTPD PTTNASLLTK LQAQNQWLQD MTHLILRSF KEFLQSSLRA LRQM
TESTED APPLICATIONS:	
BIOLOGICAL ACTIVITY:	The ED50 was determined by the dose-dependent stimulation of the proliferation of the IL-6 dependent murine 7TD1 cells is ≤ 0.1 ng/mL, corresponding to a specific activity of $\geq 1 \times 10^7$ 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:	HGF, HSF, BSF2, IL-6, IFNB2, Interleukin-6, B-cell stimulatory factor 2
ACCESSION NO.:	NP_000591.1
PROTEIN GI NO.:	10834984

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 α and gp130. Murine IL-6 is inactive on human cells, while both human and murine are equally active on murine cells. Recombinant human IL-6 is a 20.9 kDa protein containing 184 amino acid residues.

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