

Recombinant Mouse IL-6

Catalog # FL066

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of rMuIL-6 protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Mouse
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by the dose-dependent stimulation of the proliferation of IL-6-dependent mouse 7TD1 cells is less than 0.02 ng/ml, corresponding to a specific activity of $\geq 5 \times 10^7$ IU/mg.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, with 150 mM NaCl, pH 7.0.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 100mM Acetic Acid to a concentration of 0.1 mg/ml. Stock solutions should be aliquoted into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Accession #	P08505 Phe25-Thr211, with an N-terminal Met
Amino acid sequence	MFPTSQVRRGDFTEDTTPNRPVYTTSQVGGGLITHVLWEIVEMRKELCNGNSDCMNNDDALAENNLKLEIQRNDGQYQTGYNQEICLLKISSGLLEYHSYLEYMKNNLKDKNKDKARVLQRDTETLIHIFNQEVKDLHKIVLPTPISNALLTDKLESQKEWLRTKTIQFILKSLEEFKVTLRSTRQT
Molecular weight	Approximately 21.7 kDa, a single non-glycosylated polypeptide chain containing 188 amino acids.
Synonyms	B-cell hybridoma growth factor, Interleukin HP-1
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Mouse IL-6 is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Interleukin-6 (IL-6) encoded by the IL-6 gene, acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response. IL-6 is a pleiotropic cytokine that plays an important role in host defense by regulating immune and inflammatory responses. 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. Mouse IL-6 is inactive on human cells, while both human and Mouse are equally active on Mouse cells. Recombinant Mouse IL-6 is a 21.7kDa globular protein containing 188 amino acid.

