

BACKGROUND

Interleukin 6 (IL-6) is an important pro-inflammatory and anti-inflammatory cytokine expressed by T cells, macrophages and muscle cells. IL-6 signals through a receptor complex containing two receptors, IL-6Ra and gp130. IL-6 has an important function in promoting fever and can serve to stimulate an immune response to trauma. IL-6 is often used for growth of hybridoma cell lines. Human IL-6 is active on mouse and rat cells.

Recombinant rat IL-6 is a non-glycosylated protein, containing 187 amino acids and having a molecular mass of 21.7 kDa.

Alternative Names:

IFN- β 2, B-cell Differentiation Factor, BSF-2, HSF, MGI-2

Amino Acid Sequence:

MFPTSQVRRG DFTEDTTHNR PVYTTSQVGG LITYVLR EIF
EMRKELCNGN SDCMNSDDAL SENNLKLP EI QRNDGCFQTG
YNQEICLLKI CSGLLEFRFY LEFVKNNLQD NKKDKARVIQ
SNTETLVHIF KQEIKDSYKI VLPTPTSNAL LMEKLESQKE
WLRTKTIQLI LKALEEFLKV TMRSTRQT

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant rat IL-6 is lyophilized from 0.1% TFA.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with 10 mM HCl at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by a dose-dependent stimulation of mouse 7TD1 cells and is less than 0.01 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

