

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 human IL-6 is a non-glycosylated protein, containing 184 amino acids and having a molecular weight of 21 kDa.

Alternative Names:

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

Amino Acid Sequence:

PVPPGEDSKD VAAPHRQPLT SSERIDKQIR YILDGISALR
KETCNKSNMC ESSKEALAEN NLNLPKMAEK DGCFQSGFNE
ETCLVKIITG LLEFEVYLEY LQNRFESEEE QARAVQMSTK
VLIQFLQKKA KNLDAITTPD PTTNASLLTK LQAQNQWLQD
MTTHLILRSF KEFLQSSLRA LRQM

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human IL-6 is lyophilized from 10 mM Acetic Acid.

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 the dose-dependant stimulation of mouse 7TD1 cells and is typically less than 1 ng/ml.

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

