Recombinant Human Interleukin-6 / IL-6



Cat.No # MIL1006 Lot.No : Refer to Vial

Packaging: 10ug \ 50ug \ 500ug



Description

Cytokines of the IL6/GCSF/MGF family are glycoproteins of about 170 to 180 amino acid residues that contain four conserved cysteine residues involved in two disulfide bonds. They have a compact, globular fold (similar to other interleukins), stabilized by the 2 disulfide bonds. One half of the structure is dominated by a 4 alpha-helix bundle with a left-handed twist; the helices are anti-parallel, with 2 overhand connections, which fall into a 2-stranded anti-parallel beta-sheet. The fourth alpha helix is important to the biological activity of the molecule. Interleukin-6 (IL-6) is an important proinflammatory and immunoregulatory cytokine expressed by various cells. Interleukin-6 has been shown to inhibit the growth of early stage and to promote the proliferation of advanced stage melanoma cells in vitro.

Amino acid sequence

VPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRKETCNKSNMCESSKEALAENNLNLPKMAEKDGCFQSGFNEETCLVKI ITGLLEFEVYLEYLQNRFESSEEQARAVQMSTKVLIQFLQKKAKNLDAITTPDPTTNASLLTKLQAQNQWLQDMTTHLILRSFKEFL QSSLRALRQM

Origin

Recombinant Human Interleukin-6 is produced by our E.coli expression system and the target gene encoding Val30-Met212 is expressed.

Quality control

Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin

Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test.

Biological Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 20-100pg/ml.

Formulation

Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Dissolution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in 1X PBS. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Storage condition

Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days.

Aliquots of reconstituted samples are stable at < -20°C for 3 months.

For Research Use Only. Not for use in diagnostic procedures.

