

# Recombinant Murine Interleukin-6 (IL-6)

## Certificate of Analysis and Data Sheet

➤ <b>Source:</b> E.Coli	➤ <b>Catalog No.</b> CTK-350
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### ➤ **Background:**

Interleukin (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.

### ➤ **Description :**

Recombinant Murine IL-6 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 187 amino acids and having a molecular mass of 21709 Dalton.

Mouse IL-6 is purified by proprietary chromatographic techniques.

### ➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### ➤ **Formulation:**

The protein was lyophilized from a concentrated (1mg/ml) solution containing 50 mM NH<sub>4</sub>HCO<sub>3</sub>, pH 8.0.

### ➤ **Solubility:**

It is recommended to reconstitute the lyophilized IL-6 in sterile 18MΩ-cm. H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### ➤ **Stability:**

Lyophilized IL-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution IL-6 should be stored at 4° C between 2-7 days and for future use below -18° C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please avoid freeze-thaw cycles.**

➤ **Purity:**

Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Anion-exchange FPLC.

(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Amino acid sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Phe-Pro-Thr-Ser.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Biological Activity:**

The ED50 as determined by the dose-dependant stimulation of murine 7TD1 cells is less than 0.02 ng/ml, corresponding to a Specific Activity of  $1 \times 10^7$  IU/mg.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of IL-6.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm.

2. Analysis by RP-HPLC, using a standard solution of IL-6 as a Reference Standard.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.