

Recombinant Murine Interleukin-2

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. CTK-370
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➤ Description :

Recombinant Murine IL-2 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 179 amino acids and having a molecular mass of 17231 Dalton.

The Recombinant Murine IL-2 is purified by proprietary chromatographic techniques.

➤ Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

➤ Formulation:

The protein (1mg/ml) was lyophilized after extensive dialysis against 10mM sodium citrate buffer to a pH=4.

➤ Solubility:

It is recommended to reconstitute the lyophilized Murine IL-2 in sterile 20mM AcOH not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

➤ Stability:

Lyophilized Recombinant Murine IL-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Murine IL-2 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 Ala-Pro-Thr-Ser-Ser.

➤ **Dimers and aggregates:**

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

➤ **Biological Activity:**

This Recombinant Murine IL-2 is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of murine CTLL-2 cells is < 0.2 ng/ml, corresponding to a Specific Activity of 5 MIU/mg.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of Murine IL-2.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.482 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of IL-2 as a Reference Standard.

➤ **Usage:**

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