

DATASHEET

Name	IL-2, HUMAN		
Product	Interleukin-2, Human	Article-No.	40128
Formulation	White powder - (1.1mg/ml) was lyophilised after extensive dialysis against 0.17mg sodium monobasic & 0.89mg dibasic sodium phosphate buffer to a pH=7.5.	Storage	Freezer at -20°C Prevent freeze-thaw cycles

Introduction:

Interleukin-2 is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL4) and interleukin 7 (IL7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory model for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli.

Description:

Human Interleukin-2 produced in *Escherichia Coli* is a single, non-glycosylated mutein (variant form) of human IL-2 polypeptide chain containing 134 amino acids and having a molecular mass of 15517 Dalton. rHuIL-2 has an Ser substitute for Cysteine at position 126. The rHuIL-2 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*

Purity: > 98.0% (per RP-HPLC & SDS-PAGE)

Solubility:

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

Stability:

Lyophilised rHuIL-2, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuIL-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).

DATASHEET

Amino acid sequence:

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

Biological Activity:

The ED₅₀ as determined by the dose-dependent stimulation of mouse CTLL-2 cells is <0.0645ng/ml, corresponding to a Specific Activity of 16.9 MIU/mg.

Protein content:

Protein quantification was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.614 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 Interleukin-2 as a reference standard.

Usage:

Our products are intended for lab research only. Not for human, animal or diagnostic use.