California Bioscience

83103 Avenue 48, Ste.1B #204
Coachella, CA 92236 USA

Product Datasheet

Product Name	Recombinant Human Interleukin-2
Cata No	CB500024
Source	Escherichia Coli.
Synonyms	T-cell growth factor (TCGF), Aldesleukin, Lymphokine, IL-2

Description

IL2 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 mode 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.

Interleukin-2 Human Recombinant produced in E.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.
Our Interleukin -2 has an Ser substitute for Cysteine at position 126.
The IL-2 is purified by proprietary chromatographic techniques.

Purity

Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Specific Activity

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

Storage

Lyophilized Interleukin-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution IL2 should be stor ed at 4℃ between 2-7 days and for future use below -18℃ .
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Formulation

The protein (1.1mg/ml) was lyophilized after extensive dialysis against 0.17mg sodium monobasic & 0.89mg dibasic sodium phosphate buffer to a pH=7.5.

Quantitation

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.2875 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 VEGF as a Reference Standard.

*** For Non-Clinical Research Use Only ***