83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone : +1.6268339877 Email : info@cali-bio.com

# **Product Datasheet**

Product Name Interleukin-2 Human Recombinant, Yeast

Cata No CB501338

Source Saccharomyces cerevisiae

Synonyms Interleukin-2, T-cell growth factor (TCGF), Aldesleukin, Lymphokine, IL-2.

### **Descriptio**

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 yeast is a single, glycosylated polypeptide chain containing 133 amino acids and having a molecular mass of 15 kDa.

The IL-2 is purified by proprietary chromatographic techniques.

# **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **Biological Activity**

The biological activity is tested in a cell proliferation assay using an IL-2 dependent murine cytotoxic T cell line.

#### **Purity**

Greater than 97.0% as determined by: (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

#### **Formulation**

The protein (1.1mg/ml) was lyophilized after extensive dialysis against 20mM phosphate buffer to a pH=7.6.

#### Reconstitution

It is recommended to reconstitute the lyophilized Interleukin-2 in sterile  $18M\Omega$ -cm H2O not less than  $100\mu g/ml$ , which can then be further diluted to other aqueous solutions.

## **Stability**

Lyophilized Interleukin-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL2 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 prevent freeze-thaw cycles.

### Sequence

APTSSSTKKTQLQLEHLLLD LQMILNGINNYKNPKLTRML TFKFYMPKKATELKHLQCLE EELKPLEEVLNLAQSKNFHL RPRDLISNINVIVLELKGSE TTFMCEYADETATIVEFLNR WITFCQSIISTLT

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