

GRF-10557 Recombinant Human Interleukin-2

Size: 10 ug

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

**Introduction:** 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.

Description: Interleukin-2 Human Recombinant produced in E.Coli is a single, non-

glycosylated polypeptide chain containing 134 amino acids and having a molecular mass of 15kDa. The IL-2 is purified by proprietary chromatographic

techniques.

Source: Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: The protein was lyophilized from a 0.2µm filtered concentrated solution

(1.0mg/ml) in PBS, pH 5.0.

**Solubility:** It is recommended to reconstitute the lyophilized Interleukin-2 in sterile distilled

water not less than 100µg/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.

**Purity:** Greater than 97.0% as determined by:

(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Amino acid sequence: APTSSSTKK TQLQLEHLLL DLQMILNGIN NYKNPKLTRM LTFKFYMPKK

ATELKHLQCL EEELKPLEEV LNLAQSKNFH LRPRDLISNI NVIVLELKGS

ETTFMCEYAD ETATIVEFLN RWITFCQSII STLT.

Biological Activity: The ED<sub>50</sub> as determined by the dose-dependent stimulation of murine CTLL-2

cells is less than 0.1 ng/ml, corresponding to a Specific Activity of 1x10<sup>7</sup> IU/mg.