



Ref : 04-huIL-2-50 µg  
Name : human IL-2, 50 µg Liquid  
Batch : DP-06-01

## Specifications and Use

### Source

- A DNA sequence encoding the mature human IL-2 protein sequence with 125 cys. aa. mutated to Ala aa was expressed in *pichiapastoris* yeast.

### Molecular Mass

- The *pichiapastoris* yeast expressed mature human IL-2 with 125 cys. aa mutated to Ala aa contains 133 amino acid residues and has a predicted molecular mass of approximately 15kD.

### Purity

- > 97%, as determined by SDS-PAGE and HPLC method.

### Endotoxin Level

- < 10EU/0.3mg of the cytokine as determined by the LAL method.

**Activity** • Measured in a cell proliferation assay using an IL-2 dependent murine cytotoxic T cell line, CTLL-2. The ED<sub>50</sub> for this effect is typically 0.25 - 0.5 ng/mL.

### Formulation

- Lyophilized from a 0.2µm filtered solution in 50mM Phosphate buffer sodium (pH 7.0) containing 50µg of human serum albumin per 1µg of cytokine.

**Reconstitution** • It is recommended that sterile ddH<sub>2</sub>O containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 1 µg/mL.

### Storage

- Lyophilized samples are stable for greater than six months from date of receipt at -20°C to -70°C.
- Upon reconstitution, this cytokine can be stored under sterile conditions at 2- 8°C for one month or at -20°C to -70°C **in a manual defrost freezer** for three months without detectable loss of activity.
- **Avoid repeated freeze-thaw cycles.**

### Human Interleukin 2

Human IL-2 (also known as TCGF) is an about 15KD factor produced mainly by activated CD4+ T cells. IL -2 induces cell cycle progression of resting cells in an antigen non-specific manner and allows clonal expansion of activated T cells. IL-2 also acts on activated B cells, monocytes, NK, LAK cells, and on oligodendroglial cells in vitro. In addition, IL-2 plays a role in hematopoiesis, tumor surveillance and anti-inflammatory reactions and hence is a central regulator of the immune response. Non-glycosylated IL-2 is biologically active. Recombinant human IL-2 is biologically active and can promote proliferation of T lymphocytes in culture.  
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