

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Interleukin-2 (rHuIL-2)

Catalog Number: PR1065

Source: Escherichia coli.

Quantity: 10µg/50µg/1.0mg

Description

Interleukin 2 is a protein that has a variety of immunologic functions, the most notable being the ability of IL-2 to promote the proliferation and maturation of activated T cells. A comparison of the amino acid sequences of human and murine IL-2 shows an approximately 60% sequence similarity, and human sequence IL-2 has been found to be active on murine cell lines. Some of the biological activities attributed to IL-2 include:

- induction of secretion of interferon- γ and tumor necrosis factors - α and - β from peripheral blood mononuclear cells
- stimulation of the rate of synthesis of c-myc RNA and transferrin receptor
- activation of neutrophils
- stimulation of proliferation and maturation of activated helper T cells
- stimulation of proliferation of activated and natural killer cells and tumor-infiltrating lymphocytes, as well as enhancement of the ability of these cytotoxic lymphocytes to kill target cells
- induction of the expression of IL-2 receptors on T cells
- stimulation of proliferation of antibody-producing B cells

Molecular Weight:

Approximately 15 kDa, a single non-glycosylated polypeptide chain containing 134 amino acids.

Purity:

>97% by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of

murine CTLL-2 cells is less than 0.1 ng/ml, corresponding to a specific activity of $> 1 \times 10^7$ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.5.

AA Sequence:

M A P T S S S T K K T Q L Q L E H L L L D L Q M I L N
G I N N Y K N P K L T R M L T F K F Y M P K K A T E L
K H L Q C L E E E L K P L E E V L N L A Q S K N F H L
R P R D L I S N I N V I V L E L K G S E T T F M C E Y A
D E T A T I V E F L N R W I T F C Q S I I S T L T

Endotoxin:

Less than 1EU/µg of rHuIL-2 as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $<-20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Storage:

This lyophilized preparation is stable at $2-8^{\circ}\text{C}$, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at $2-8^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.

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MADE IN CHINA

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Usage:

HUMAN USE. Made in China

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR

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