

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Interleukin-11 (rHuIL-11)

Catalog Number: PR1058

Source: Escherichia coli.

Quantity: 2µg/10µg/1.0mg

Description

Interleukin 11 is a pleiotropic cytokine that was originally detected in the conditioned medium of an IL-1 α -stimulated primate bone marrow stromal cell line (PU-34) as a mitogen for the IL-6-responsive murine plasmacytoma cell line T1165. IL-11 was also independently discovered as an adipogenesis inhibitory factor (AGIF). The human IL-11 cDNA encodes a 199 amino acid residue precursor polypeptide with a 21 amino acid residue hydrophobic signal that is processed proteolytically to generate the 178 amino acid residue mature protein. IL-11 contains no cysteine residues or potential glycosylation sites. IL-11 has multiple effects on both hematopoietic and nonhematopoietic cells. Many of the biological effects described for IL-11 overlap those for IL-6. In vitro, IL-11 can synergize with IL-3, IL-4 and SCF to shorten the G0 period of early hematopoietic progenitors. IL-11 also enhances the IL-3-dependent megakaryocyte colony formation. IL-11 has been found to stimulate the T cell dependent development of specific immunoglobulin-secreting B cell.

Molecular Weight:

Approximately 19.1 kDa, a single non-glycosylated polypeptide chain containing 178 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 the proliferation of murine B9-11 was found to be less than 1 ng/ml, corresponding to a specific activity of $\square 1 \times 10^7$ IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2mm filtered concentrated solution in PBS, pH 7.4.

AA Sequence:

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

Endotoxin:

Less than 1EU/mg of rHuIL-11 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

MADE IN CHINA

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-70°C. Avoid repeated freeze/thaw cycles.

HUMAN USE. Made in China

Usage:

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

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