

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Mouse IL-1 Alpha (rMuIL-1 alpha)

Catalog Number: PR2004

Source: Escherichia coli

Quantity: 2µg/10µg/1.0mg

Description

IL-1 alpha is a non-secreted proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1alpha and IL-1beta binds to the same receptor and has similar if not identical biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity and the ability to stimulate the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1beta is a secreted cytokine, IL-1alpha is predominantly a cell-associated cytokine.

Molecular Weight:

Approximately 17.9 kDa, a single non-glycosylated polypeptide chain containing 156 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 D10S cells is < 0.002ng/mL, corresponding to a specific activity of > 5.0×10⁸ units/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:

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

Endotoxin:

Less than 1EU/mg of rMuIL-1 alpha 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°C. Further dilutions should be made in appropriate buffered solutions.

Storage:

This lyophilized preparation is stable at 2-8°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°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

MADE IN CHINA

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