

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-1 β , Human

Catalog Number: BK0094-10 μ g

Source: Escherichia coli.

Quantity: 10 μ g

Description:

Interleukin-1 beta (rhIL-1 β) is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 alpha and IL-1 beta 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-1 beta is a secreted cytokine, IL-1 alpha is predominantly a cell-associated cytokine. Recombinant human Interleukin-1 beta (rhIL-1 β) produced in E.coli is a single non-glycosylated polypeptide chain containing 153 amino acids. A fully biologically active molecule, rhIL-1 β has a molecular mass of 17.3kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

17.3 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED50 < 1.0 pg/ml, measured by the dose-dependent stimulation of mouse D10S cells, corresponding to a specific activity of 1.0×10^9 IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

APVRSLNCTLRDSQQKSLVMSGPY-
ELKALHLQGQDMEQQVVFMSFVQGEESND-
KIPVALGLKEKNLYLSCVLKDDKPT-
LQLESVDPKNYPKKKMEKRFVFNKIEINN-
KLEFESAQFPNWY-
ISTSQAENMPVFLGGTKGGQDITDFTMQFVSS

Endotoxin:

<0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant human Interleukin-1 beta (rhIL-1 β) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rhIL-1 β should be stable up to 2 weeks at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.