

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-1 β , Mouse

Catalog Number: BK0095-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Interleukin-1 Beta (IL-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 mouse Interleukin-1 Beta (rmIL-1 β) produced in E. coli is a single non-glycosylated polypeptide chain containing 153 amino acids. A fully biologically active molecule, rmIL-1 β is obtained by proprietary chromatographic techniques at GenScript, with an apparent molecular weight of 17.5kDa analyzed by reducing SDS-PAGE.

Molecular Weight:

17.5kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED₅₀ < 2.0 pg/ml, measured by the dose-dependent stimulation of mouse D10S cells, corresponding to a specific activity of > 5.0 × 10⁸ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MVPIRQLHYRLRDEQQKSLVLSDPY-
ELKALHLNGQNINQQVIFSMSFVQGEPSND-
KIPVALGLKGKNLYLSCVMKDGTP-
LQLESVDPKQYPKKKMEKRFVFNKI-
EVKSKVEFESAEPNWWY-
ISTSQAEHKPVFLGNNSGQDIIDFTMESVSS

Endotoxin:

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

Reconstitution:

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

Storage:

Lyophilized recombinant mouse Interleukin-1 Beta (rmIL-1 β) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rmIL-1 β should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Usage:

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