

## **DATASHEET** Version 20181206

## **IL-1**β, Human(CHO-expressed)

Cat. No.: Z02978-50

Size: 50.0 ug

Synonyms: Catabolin, Interleukin-1 beta, IL1F2

## **Description:**

Interleukin 1 beta 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.

## **Amino Acid Sequence:**

00001 APVRSLNCTL RDSQQKSLVM SGPYELKALH LQGQDMEQQV 00041 VFSMSFVQGE ESNDKIPVAL GLKEKNLYLS CVLKDDKPTL 00081 QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW 00121 YISTSQAENM PVFLGGTKGG QDITDFTMQF VSS Source: CHO Species: Human

**Biological Activity**:  $ED_{50}$ < 10 pg/ml, measured in a cell proliferation assay using D10S cells, corresponding to a specific activity of >1 x 10<sup>8</sup> units/mg.

**Molecular Weight**: 17kDa, observed by non-reducing SDS-PAGE.

**Formulation**: Lyophilized after extensive dialysis against PBS.

**Reconstitution**: Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**Purity**: > 95% as analyzed by SDS-PAGE and HPLC.

**Endotoxin Level**: <0.2 EU/ $\mu$ g, determined by LAL method.

**Storage**: Lyophilized recombinant human Interleukin 1 beta (IL-1 beta) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIL-1 $\beta$  should be stable up to 1 week at 4°C or up to 2 months at -20°C.