

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IL-1 $\beta$ , Rat (HEK 293-expressed)

Catalog Number: BK0313-5 $\mu$ g

Source: HEK 293

Quantity: 5 $\mu$ g

### 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.

### Molecular Weight:

17~22 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 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

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

VPIRQLHCRLRDEQQKCLVLSDPCELKALHLNG  
QNISQQVVFMSFVQGETSND-  
KIPVALGLKGLNLYLSCVMKDGTP-  
LQLESVDPKQYPKKKMEKRFVFNKI-  
EVKTKVEFESAQFPNWy-  
ISTSQAHRPVFLGNSNGRDIVDFTMEPVSS

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

### Storage:

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

### Usage:

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