

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IL-1 $\beta$ , Porcine

Catalog Number: BK0096-10 $\mu$ g

Source: Escherichia coli.

Quantity: 10 $\mu$ g

### Description:

Interleukin-1 beta (rpIL-1 $\beta$ ) is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. IL-1 $\alpha$  and IL-1 $\beta$  are structurally related polypeptides that share approximately 27% amino acid (aa) identity in porcine. While IL-1 $\alpha$  and IL-1 $\beta$  are regulated independently, they bind to the same receptor and exert identical biological effects. IL-1 $\beta$  stimulates thymocyte proliferation by inducing il-2 release, b-cell maturation and proliferation, and fibroblast growth factor activity. Recombinant Porcine IL-1 $\beta$  produced in E.coli is a single non-glycosylated polypeptide chain containing 154 amino acids. A fully biologically active molecule, rpIL-1 $\beta$  has a molecular mass of 17.7 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

17.7 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 1ng/ml, measured by the dose-dependent stimulation of mouse D10S cells, corresponding to a specific activity of  $1.0 \times 10^6$  IU/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MANVQSMECKLQDKDKHKSIVLAGPHM-  
LKALHLLTGDLKREVVFCMSFVQGDDSN-  
KIPVTLGIKGNLYLSCVMKDNTPTLQLE-  
DIDPKRYPKRDMEKRFVYKTEIKNRVEFESA-  
LYPNWYISTSQAEQKPVFLGNSKGRQDITDFT-  
MEVLSP

### 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 Porcine IL-1 $\beta$ , remains stable up to 6 months at -80  $^{\circ}$ C from date of receipt. Upon reconstitution, Porcine IL-1 $\beta$  should be stable up to 1 week at 4  $^{\circ}$ C or up to 3 months at -20  $^{\circ}$ C.

### Usage:

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