

## **DATASHEET** Version 20181206

## IL-1β, Porcine

Cat. No.: Z03278-1

**Size**: 1.0 mg

**Synonyms**: Catabolin, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF), IL1F2, IL-1 beta.

## **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.

Source: E. coli

**Biological Activity**:  $ED_{50}$  < 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.

**Molecular Weight**: 17.7 kDa, observed by reducing SDS-PAGE.

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

**Reconstitution**: Reconstituted in  $ddH_2O$  or PBS at 100  $\mu$ g/ml.

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

**Endotoxin Level**: < 0.2 EU/µg, determined by LAL method.

**Storage**: Lyophilized recombinant Porcine IL-1 $\beta$ , remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Porcine IL-1 $\beta$  should be stable up to 1 week at 4°C or up to 3 months at -20°C.