

IL-1 β , Rat (HEK 293-expressed)

Cat. No.: Z03042-5

Size: 5.0 μ g

Synonyms: Catabolin, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF)

Description:

Interleukin-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.

Amino Acid Sequence:

```
00001 VPIRQLHCLRL RDEQQKCLVL SDPCELKALH LNGQNISQQV
00041 VFSMSFVQGE TSNDKIPVAL GLKGLNLYLS CVMKDGTPTL
00081 QLESVDPKQY PKKKMEKRFV FNKIEVTKV EFESAQFPNW
00121 YISTSQAEHR PVFLGNSNGR DIVDFTMEPV SS
```

Source: HEK 293

Species: Rat

Biological Activity: ED₅₀ < 10 pg/ml, measured in a cell proliferation assay using D10S cells, corresponding to a specific activity of >1 x 10⁸ units/mg

Molecular Weight: 17 22 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

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

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

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

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