



Technical Data Sheet

Recombinant Rat IL-1 beta (rRaIL-1 beta)

Rat Interleukin-1 beta

IL-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.

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| Catalog Number: | RC252-12B |
| Source: | <i>Escherichia coli</i> . |
| Molecular Weight: | Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids. |
| Quantity: | 2ug/10ug/1.0mg |
| AA Sequence: | MVPIRQLHCR LRDEQKCLV LSDPCELKAL HLNGQNISQQ VVFSMSFVQG ETSNDKIPVA LGLKGLNLYL SCVMKDGTPPT LQLESVDPKQ YPKKKMEKRF VFNKIEVKTK VEFESAQFPN WYISTSQAEH RPVFLGNSNG RDIVDFTMEP VSS |
| Purity: | >97% by SDS-PAGE and HPLC analyses. |
| Biological Activity: | Fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of murine D10S cells is < 0.1ng/mL, corresponding to a specific activity of > 1×10 ⁷ units/mg. |
| Formulation: | Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4. |
| Endotoxin: | Less than 1EU/µg of rRaIL-1 beta as determined by LAL method. |
| Reconstitution: | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions. |



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Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. **Avoid repeated freeze/thaw cycles.**

Usage:

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