



Technical Data Sheet

Recombinant Murine Interleukin-1 beta (rMu IL-1 β)

Murine Interleukin-1 beta

IL-1 β is a pro-inflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 α and IL-1 β 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 β is a secreted cytokine, IL-1 α is predominantly a cell-associated cytokine.

Catalog Number:	RC232-12B
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 17.5kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Quantity:	2 μ g/10 μ g/1000 μ g
Purity:	>98% by SDS-PAGE and HPLC analyses.
Biological Activity:	The ED ₅₀ as determined by the dose-dependent stimulation of murine D10S cells is < 0.002 ng/ml, corresponding to a specific activity of > 5 x 10 ⁸ units/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.
AA Sequence:	MVPIRQLHYR LRDEQOKSLV LSDPYELKAL HLNGQNINQQ VIFSMSFVOG EPSNDKIPVA LGLKGKNLYL SCVMKDGTP LQLESVDPKQ YPKKMEKRF VFNKIEVKSK VEFESAEPN WYISTSQAEH KPVFLGNNSG QDIIDFTMES VSS
Endotoxin:	Less than 1EU/ μ g of rMuIL-1 β 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 \leq -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:

This material is offered by Bio Basic Inc for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.