Technical Data Sheet

Recombinant Rhesus macaque IL-1 beta (rRhIL-1 beta)

Rhesus macaque 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. The 17 kDa mature rhesus IL1β shares 96% aa sequence identity with human IL-1 beta.

Catalog Number:	RC222-12B
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Quantity:	2ug/10ug/1 mg
AA Sequence:	APVRSLHCTLRDAQLKSLVMSGPYELKALHLQGQDLEQQVVFSMSFVQGEESNDKI PVALGLKAKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFVFNKIEINNKLEFESA QFPNWYISTSQAENMPVFLGGTRGGQDITDFTMQFVSS
Purity:	>98% 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 D10.G4.1 mouse helper T cells is typically 3-10pg/mL.
Formulation:	Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1EU/μg of rRhIL-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.
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.