

Overview

Synonyms	Interleukin-1 beta (IL-1 β), Rhesus Macaque;
Description	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 IL1 β shares 96% aa sequence identity with human IL-1 beta.
Species Source	RhesusMacaque <i>E. coli</i>
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine D10.G4.1 cells is less than 10 pg/ml, corresponding to a specific activity of > 1.0 × 10 ⁸ IU/mg.
Sequence	APVRSLSHCTL RDAQLKSLVM SGPYELKALH LQGQDLEQQV VFMSMSFVQGE ESNDKIPVAL GLKAKNLYLS CVLKDDKPTL QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW YISTSQAENM PVFLGGTRGG QDITDFTMQF VSS

Properties

Measured Molecular Weight	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Purity	> 98 % by SDS-PAGE and HPLC analyses.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
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 d -20 °C. Further dilutions should be made in appropriate buffered solutions.
Endotoxin Level	Less than 1 EU/ μ g of rRhIL-1 ² as determined by LAL method.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Usage	This material is for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE
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.

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura,
Delhi – 110034 (INDIA).

Mobile: +91-9810521400, Ph: +91-11-42208000

Email: customerservice@lifetechindia.com

Web: www.lifetechindia.com