

DATASHEET

Version 20181206

IL-1 β , RhesusMacaque

Cat. No.: Z02758-1

Size: 1.0 mg

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.

Amino Acid Sequence:

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00001 APVRS LHCTL RDAQLKSLVM SGPYELKALH LQGQDLEQQV
00041 VFMSFVQGE ESNDKIPVAL GLKAKNLYLS CVLKDDKPTL
00081 QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW
00121 YISTSQAENM PVFLGGTRGG QDITDFTMQF VSS
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Source: *E. coli*

Species: RhesusMacaque

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ 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 × 10⁸ IU/mg.

Molecular Weight: Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 98 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/ μ g of rRhIL-1 β as determined by LAL method.

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.