

Recombinant Mouse IL-1 beta

Catalog # FL070

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of rMuIL-1β protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Mouse
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using mouse D10S cells is less than 2 pg/ml, corresponding to a specific activity of $\geq 5.0 \times 10^8$ IU/mg.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, with 150 mM NaCl, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a 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 $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Accession #	P10749 Val118-Ser269
Amino acid sequence	VPIRQLHYRLRDEQQKSLVLSDPYELKALHLNGQINQVIFSMSFVQGEPSNDKIPVALGLKGGKLYLSCVMKDGTPTLQL ESVDPKQYPKKMEKRFVFNKIEVKSKVEFESAEPFNWYISTSAEHPVFLGNNSGQDIIDFTMESVSS
Molecular weight	Approximately 17.5 kDa, a single non-glycosylated polypeptide chain containing 152 amino acids.
Synonyms	Catabolin, Leukocyte Endogenous Mediator, LEM, Lymphocyte-activating factor, LAF, Mononuclear Cell Factor, MCF, Endogenous Pyrogen, EP
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Mouse IL-1 beta is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Interleukin-1beta (IL-1β) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, hematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1α and IL-1β binds to the same receptor and has similar but not identical biological properties. The mature mouse IL1β shares 90% amino acid sequence identity with cotton rat and rat and 65%-78% identity with canine, human and rhesus IL1β. Recombinant Mouse IL-1β is a 17.5kDa protein containing 152 amino acids.

