

IL-1 beta, rat recombinant

Information

Gene ID	Unigene: Rn.9869.
Accession #	Q63264
Alternate Names	Catabolin, Leukocyte Endogenous Mediator, LEM, Lymphocyte-activating factor, LAF, Mononuclear Cell Factor, MCF, Endogenous Pyrogen, EP
Source	<i>Escherichia coli</i> .
M.Wt	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
AA Sequence	MVPIRQLHCR LRDEQQKCLV LSDPCELKAL HLNQONISQQ VVFSMSFVQG ETSNDKIPVA LGLKGLNLYL SCVMKDGTPPT LQLESVDPKQ YPKKKMEKRF VFNKIEVKTK VEFESAQFPN WYISTSQAEH RPVFLGNSNG RDIVDFTMPEP VSS
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. - 12 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.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, with 5 % trehalose, 0.02 % Tween-20.
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.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine D10S cells is less than 0.1 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁷ IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	10 µg	100 µg	500 µg
IL-1 beta, rat recombinant	10 µg	100 µg	500 µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 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.

Quality Control

Purity	> 96 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/ μ g of rRtIL-1 β as determined by LAL method.

Description

Interleukin-1beta (IL-1 β) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1 α and IL-1 β binds to the same receptor and has similar but not identical biological properties. The mature rat IL1 β shares 90 % a.a. sequence identity with cotton rat and mouse and 65 % to 77 % with canine, human, and rhesus IL1 β .

Reference

1. Bankers-Fulbright, J.L., K.R. Kalli, and D.J. McKean. 1996. Life Sci, 59: 61-83.
2. Dinarello, C.A. 1997. Semin Oncol, 24: S9-81-S9-93.
3. Martinon, F., and J. Tschopp. 2007. Cell Death Differ, 14: 10-22.
4. Gray, P.W., D. Glaister, E. Chen, et al. 1986. J Immunol, 137: 3644-8.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

