

Recombinant Rat IL-1 alpha

Information

Gene ID	24493	
Accession #	P16598	
Alternate Names		
Source	Escherichia coli.	
M.Wt	Approximately 17.8 kDa, a single non-glycosylated polypeptide chain containin 156 amino acids.	
AA Sequence	SAPHSFQNNL RYKLIRIVKQ EFIMNDSLNQ NIYVDMDRIH LKAASLNDLQ LEVKFDMYAY SSGGDDSKYP VTLKVSNTQL FVSAQGEDKP VLLKEIPETP KLITGSETDL IFFWEKINSK NYFTSAAFPE LLIATKEQSQ VHLARGLPSM IDFQIS	
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 20 mM Tris, 150 mM NaCl, pH 8.5.	
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 0.005 ng/ml, corresponding to a specific activity of > 2.0 × 10 8 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
Recombinant Rat IL-1 alpha	10 µg	100 µg	500 µg

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Quality Control

Purity	> 97 % by SDS-PAGE and HPLC analyses.	P. Lander Book
Endotoxin	Less than 1 EU/μg of rRtlL-1α as determined	by LAL method.

Description

Interleukin-1 alpha (IL-1 α) 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. Recombinant rat IL-1 alpha contains 150 amino acids which is a single non-glycosylated polypeptide.

Reference

- 1. Nicklin MJ, Weith A, Duff GW. 1994. Genomics. 19:382-4.
- 2. Bankers-Fulbright JL, Kalli KR, McKean DJ. 1996. Life Sci. 59:61-83.
- 3. Dinarello CA. 1997. Semin Oncol. 24:S9-81-S9-93.





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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

