

## Recombinant Rat Interleukin-1 (rIL-1)

Publication Number MAN0004507

**Rev.** 1.00

Catalog Number:	PRC0014	PRC0015	PRC0013			
Quantity:	10 µg	25 µg	1 mg			
Lot Number:	See product label.					
Molecular Weight:	18 kDa					
Purity:	≥95% as determined by SDS–PAGE analysis.					
<b>Biological Activity:</b>	$ED_{50}$ range = $\leq 0.005$ ng/mL, determined by the dose dependent proliferation of mouse D10S cells. The optimal concentration for individual application should be determined by an initial dose response assay.					
Formulation:	Lyophilized, carrier–free.					
Sterility:	Filtered prior to lyophilization through a 0.22 micron sterile filter.					
Endotoxin:	<0.1 ng/µg					
Production:	Produced in <i>E. coli</i> and purified by sequential chromatography.					
Reconstitution Recommendation:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized rIL–1 $\alpha$ in sterile, distilled water to a concentration of 0.1–1.0 mg/mL. Recombinant rIL–1 $\alpha$ is also soluble in most buffered solutions. Further dilutions should be made in buffered solution containing a carrier protein such as PBS + 0.1% BSA.					
Suggested Working Dilutions:	The optimal concentration should be determined for each specific application.					
Storage:	Store lyophilized rIL–1 $\alpha$ at 2°C to 8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at $\leq -20$ °C. Avoid repeated freeze/thaw cycles.					
Expiration Date:	See product label.					
References:	Nishida, T., N. Nishino, M. Takano, Y. Sekiguchi, K. Kawai, K. Mizuno, S. Nakai, Y. Masui, and Y. Hirai (1989) Molecular cloning and expression of rat interleukin-1 alpha cDNA. J. Biochem. 105:351–357.					
	Orencole, S.F. and C.A. Dinarello (1989) Characterization of a subclone (D10S) of the D10.G4.1 helper T-cell line which proliferates to attomolar concentrations of interleukin-1 in the absence of mitogens. Cytokine 1:14–22.					
	Hirano, T., (1994) In: The Cytokine Handbook, 2nd Edition, (ed A. Thomson), Academic Press Limited, San Diego, Ca, pp. 145–168.					
	Dinarello, C. (1996) Biological basis for interleukin-1 in disease. Blood 87:2095–2147.					
	<ul> <li>Anforth, H.R., R. Bluthe, A. Bristow, S. Hopkins, M. Lenczowski, G. Luheshi, J. Lundkvist, B. Michaud, Y. Mistry,</li> <li>A. Van Dam, C. Zhen, R. Dantzer, S. Poole, N. Rothwell, F. Tilders, and E. Wollman (1998) Biological activity</li> <li>and brain actions of recombinant rat interleukin-1alpha and interleukin-1beta. Eur. Cytokine Netw. 9:278–288.</li> </ul>					

## **Explanation of Symbols**

The symbols present on the product label are explained below:

Symbol	Description	Symbol	Description
REF	Catalog Number	LOT	Batch code
RUO	Research Use Only	IVD	In vitro diagnostic medical device
$\Sigma$	Use by	X	Temperature limitation
	Manufacturer	EC REP	European Community authorized representative
[-]	Without, does not contain	[+]	With, contains
erolae. Solae. from Light	Protect from light	Â	Consult accompanying documents
Ĩ	Directs the user to consult instructions for use (IFU), accompanying the product.		

## Limited Use Label License: Research Use Only

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product only to perform internal research for the sole benefit of the purchaser. No right to resell this product or any of its components is conveyed expressly, by implication, or by estoppel. This product is for internal research purposes only and is not for use in commercial applications of any kind, including, without limitation, quality control and commercial services such as reporting the results of purchaser's activities for a fee or other form of consideration. For information on obtaining additional rights, please contact <u>outlicensing@lifetech.com</u> or Out Licensing, Life Technologies, 5791 Van Allen Way, Carlsbad, California 92008.

For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.

Manufactured under ISO 13485 Quality Standard

Manufacturing site: 7335 Executive Way | Frederick, MD 21704 | Toll Free in USA 800.955.6288

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