

Recombinant Human Interleukin-1 α (IL-1 α)








Publication Number MAN0004298







Rev. 2.00

Catalog Number:	PHC0015	PHC0017	PHC0011	PHC0013
Quantity:	5 μ g	25 μ g	100 μ g	1 mg
Lot Number:	See product label.			
Molecular Weight:	18 kDa			
Purity:	>95% as determined by SDS-PAGE analysis.			
Amino Acid Sequence:	SAPFSFLSNV KYNFMRIIKY EFILNDALNQ SIIRANDQYL TAAALHNLDE AVKFDMGAYK SSKDDAKITV ILRISKTLQLY VTAQDEDQPV LLKEMPEIPK TITGSETNLL FFWETHGTKN YFTSVAHPNL FIATKQDYWV CLAGGPSIT DfqILENQA			
Biological Activity:	ED ₅₀ range = 0.001–0.005 ng/mL (Specific Activity 1.0 \times 10 ⁹ –2.0 \times 10 ⁸ units/mg), determined by the dose dependent proliferation of mouse D10S cells. Optimal concentration for individual applications should be determined by a dose response assay.			
Formulation:	Lyophilized, carrier free.			
Sterility:	Filtered prior to lyophilization through a 0.22 micron sterile filter.			
Endotoxin:	<0.1 ng/ μ g			
Production:	Recombinant human IL-1 α is produced in <i>E. coli</i> and purified via sequential chromatography.			
Reconstitution Recommendation:	We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Lyophilized human IL-1 α should be reconstituted in deionized water to 0.1–1.0 mg/mL to regain full activity. These stock solutions should be apportioned into working aliquots and stored at \leq -20°C. Further dilutions should be made in low endotoxin medium or buffered solution with heat inactivated FCS or tissue culture grade BSA.			
Suggested Working Dilutions:	The optimal concentration should be determined for each specific application.			
Storage:	Lyophilized human IL-1 α should be stored at 2°C to 8°C, preferably desiccated. Store reconstituted human IL-1 α at \leq -20°C (not in a frost-free freezer). Keep freeze-thaw cycles to a minimum.			
Expiration Date:	Expires one year from date of receipt when stored as instructed.			
References:	<p>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. <i>Cytokine</i> 1:14–22.</p> <p>Stella, N., A. Estellés, J. Siciliano, M. Tencé, S. Desagher, D. Piomelli, J. Glowinski, and J. Prémont (1997) Interleukin-1 enhances the ATP-evoked release of arachidonic acid from mouse astrocytes. <i>The Journal of Neuroscience</i> 17(9): 2939–2946.</p> <p>Furutani, Y., M. Notake, T. Fukui, M. Ohue, H. Nomura, M. Yamada, and S. Nakamura (1986) Complete nucleotide sequence of the gene for human interleukin 1 alpha. <i>Nucleic Acids Res.</i> 14(8):3167–3179.</p> <p>Scudiero D.A., R.H. Shoemaker, K.D. Paull, A. Monks, S. Tierney, T.H. Nofziger, M.J. Currens, D. Seniff, M.R. Boyd (1988) Evaluation of a soluble tetrazolium/formazan assay for cell growth and drug sensitivity in culture using human and other tumor cell lines. <i>Cancer Res.</i> 48(17):4827–4833.</p> <p>Loparev, V., J. Parsons, J. Knight, J. Fanelli Panus, C. Ray, R. Buller, D. Pickup, and J. Esposito (1998) A third distinct tumor necrosis factor receptor of orthopoxviruses. <i>Proc. Nat'l. Acad. Sci.</i> 95(7):3786–3791.</p> <p>Rajan, R., R. Vanderslice, S. Kapur, J. Lynch, R. Thompson, and D. Djakiew (1996) Epidermal growth factor (EGF) promotes chemomigration of a human prostate tumor cell line, and EGF immunoreactive proteins are present at sites of metastasis in the stroma of lymph nodes and medullary bone. <i>Prostate</i> 28(1):1–9.</p> <p>Wang, B.N., E. Kraig, and D. Kolodrubetz (2000) Use of defined mutants to assess the role of the <i>Campylobacter rectus</i> S-layer in bacterium-epithelial cell interactions. <i>Infection and Immunity</i> 68(3): 1465–1473.</p>			

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
	Catalog Number
	Research Use Only
	Use by
	Manufacturer
	Without, does not contain
	Protect from light
	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
	Batch code
	In vitro diagnostic medical device
	Temperature limitation
	European Community authorized representative
	With, contains
	Consult accompanying documents

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 outlicensing@lifetech.com 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

© 2011 Life Technologies Corporation. All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

For support visit www.lifetechnologies.com/support or email techsupport@lifetech.com

www.lifetechnologies.com

Revision Date 17 May 2011

