

Recombinant Mouse Tumor Necrosis Factor- α (rmTNF- α)

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Catalog Number:	PMC3014	PMC3016	PMC3015	PMC3013
Quantity:	10 μ g	25 μ g	100 μ g	1 mg
Lot Number:	See product label.			
Molecular Weight:	17.5 kDa			
Purity:	>95% as determined by SDS-PAGE analysis.			
Amino Acid Sequence:	LRSSSQNSSD KPVAHVVAANH QVEEQLEWLS QRANALLANG MDLKDNLVYV PADGLYLVYS QVLFKGGQCP DYVLLTHTVS RFAISYQEKV NLLSAVKSPC PKDTPEGAEL KPWYEPIYLG GVFQLEKGDQ LSAEVNLPKY LDFAESGQVY FRVIAL			
Biological Activity:	ED ₅₀ range = 0.005–0.02 ng/mL (Specific Activity: 2.0×10^8 – 5.0×10^7 units/mg), determined by the dose dependent cytotoxicity of L929 cells. Optimal concentration for individual application should be determined by a dose response assay.			
Formulation:	Lyophilized, carrier free.			
Sterility:	Filtered through a 0.22 micron sterile filter prior to lyophilization.			
Endotoxin:	<0.1 ng/ μ g			
Production:	Recombinant mouse TNF- α is produced in <i>E. coli</i> and purified via sequential chromatography.			
Reconstitution Recommendation:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized recombinant mouse TNF- α in sterile, distilled water to a concentration of 0.1–1.0 mg/mL. Further dilutions should be made in low endotoxin medium or a buffered solution containing a carrier protein such as heat inactivated FCS or tissue culture grade BSA.			
Suggested Working Dilutions:	The optimal concentration should be determined for each specific application.			
Storage:	Store lyophilized recombinant mouse TNF- α at 2°C to 8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store $\leq -20^\circ\text{C}$. Avoid repeated freeze/thaw cycles.			
Expiration Date:	Expires one year from date of receipt when stored as instructed.			
References:	<p>Fransen, L., R. Muller, A. Marmenout, J. Tavernier, J. Van der Heyden, E. Kawashima, A. Chollet, R. Tizard, H. Van Heuverswyn, A. Van Vliet, et al. (1985) Molecular cloning of mouse tumour necrosis factor cDNA and its eukaryotic expression. <i>Nucleic Acids Res.</i> 13(12):4417–29.</p> <p>Koh, J.S., Z.Y. Wang, and J.S. Levine (2000) Cytokine dysregulation induced by apoptotic cells is a shared characteristic of murine lupus. <i>J. Immunol.</i> 165(8):4190–4201.</p> <p>Marmenout, A., L. Fransen, J. Tavernier, J. Van der Heyden, R. Tizard, E. Kawashima, A. Shaw, M.J. Johnson, D. Semon, R. Muller, et al. (1985) Molecular cloning and expression of human tumor necrosis factor and comparison with mouse tumor necrosis factor. <i>Eur. J. Biochem.</i> 152(3):515–22.</p> <p>Rott, D., J.H. Zhu, S. Burnett, Y.F. Zhou, A. Wasserman, J. Walker, and S.E. Epstein (2001) Serum of cytomegalovirus-infected mice induces monocyte chemoattractant protein-1 expression by endothelial cells. <i>J. Infect. Dis.</i> 184(9):1109–1113.</p> <p>Shea-Eaton, W.K., P.P.H. Lee, and M.M. Ip (2001) Regulation of milk protein gene expression in normal mammary epithelial cells by tumor necrosis factor. <i>Endocrinology</i> 142(6):2558–2568.</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

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