Technical Data Sheet

Recombinant Murine Tumor Necrosis Factor-alpha (rMu TNF-α)

Mouse Tumor Necrosis Factor-alpha

Tumor necrosis factor alpha (TNF-α) is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes endothelial cells, smooth muscle cells and some transformed cells. Mouse TNF-α occurs as a membrane-anchored form. The naturally-occurring form of TNF-α is glycosylated, but non-glycosylated recombinant TNF-α has comparable biological activity. The biologically active native form of TNF-α is reportedly a trimer. Human and murine TNF-α show approximately 79% homology at the amino acid level and crossreactivity between the two species.

Catalog Number:	RC234-12
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 17.3 kDa. The recombinant murine TNF-alpha is a soluble 157 amino acid protein which corresponds to C-terminal extracellular domain of the full length transmembrane protein.
Quantity:	5ug/20ug/1000μg
Purity:	>97% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as determined by the cytolysis of murine L929 cells in the presence of actinomycin D is < 0.1 ng/ml, corresponding to a specific activity of > 1×10^7 units/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered solution in PBS, pH 7.2.
AA Sequence:	MLRSSSQNSSDKPVAHVVANHQVEEQLEWLSQRANALLANGMDLKDNQLVVPADGLY LVY SQVLFKGQGC PDYVLLTHTV SRFAISYQEKVNLLSAVKSP CPKDTPEGAE LKPWYEPIYL GGVFQLEKGD QLSAEVNLPK YLDFAESGQV YFGVIAL
Endotoxin:	Less than 1EU/μg of rMuTNF-α as determined by LAL method.
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.

20 Konrad Cres, Markham Ontario L3R 8T4 Canada
Tel: (905) 474 4493, (800) 313 7224 Fax: (905) 474 5794
Email: order@biobasic.com Web: www.biobasic.com

Storage:	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Usage:	This material is offered by Bio Basic Inc for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.