

Recombinant Mouse TNF alpha

Catalog # FL121

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ μ g of rMuTNF- α protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Mouse
Tag	Tag free.
Activity	Fully biologically active when compared to standard. Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED50 for this effect is 10-50 pg/ml.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a 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 \leq -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	P06804 Leu80-Leu235 with an N-terminal Met
Amino acid sequence	MLRSSSQNSSDKPVAVHVVANHQVEEQLEWLSQRANALLANGMDLKDQNQLVVPADGLYLVSQVLFKGGQCPDYVLLTHTVSRFAISYQEKVNLLSAVKSPCKDTPGAEKWPWYEPYLGGVFQLEKGDQLSAEVNLPKYLDFAESGQVYFGVIAL
Molecular weight	Approximately 17.4 kDa, a polypeptide chain containing 157 amino acids. The native form of Mouse TNF- α is reportedly a trimer.
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored \leq -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 36 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.
Precautions	Recombinant Mouse TNF alpha is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Tumor necrosis factor alpha (TNF- α), also called cachectin, is the best-known member of the TNF-family, which can cause cell death. This protein is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes, endothelial cells, smooth muscle cells and some transformed cells. The naturally-occurring form of TNF- α is glycosylated, but non-glycosylated recombinant TNF- α has comparable biological activity. Human and Mouse TNF- α show approximately 79% homology at the amino acid level and cross-reactivity between the two species. Two types of receptors for TNF- α have been described and virtually all cell types studied show the presence of one or both of these receptor types. The recombinant Mouse TNF- α is a non-glycosylated polypeptide chain containing 157 amino acids.

