

Active Recombinant Mouse Tumor Necrosis Factor

Cat. No. Tnf-310M Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant murine TNF-alpha produced in S.Lividians is a single, non-glycosylated, polypeptide chain containing 156 amino acids and having a molecular mass of 17301.32 Dalton.
Species	Mouse
Source	Streptomyces Lividans
Description	Tumor necrosis factor (TNF, cachexin or cachectin formerly known as tumor necrosis factor-alpha) is a cytokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction.
Form	Each mg contains 50mM Tris-HCL pH-8 and 20mM NaCL.
Purity	Purity Greater than 98% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Bio-activity	rmTNF-alpha is fully biologically active when compared to standard. The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is less than 0.05ng/ml, corresponding to a Specific Activity of 9x10 ⁸ IU/mg.
Physical Appearance	Sterile Filtered white lyophilized (freeze-dried) powder.
Solubility	It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

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Purity Greater than 98% as determined by	Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Protein Content determined by	UV spectroscopy at 280 nm. Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.
Amino acid sequence	MLRSSSQNSS DKPVAHVVAN HQVEEQLEWL SQRANALLAN GMDLKDNQLV VPADGLYLVY SQVLFKGQGC PDYVLLTHTV SRFAISYQEK VNLLSAVKSP CPKDTPEGAE LKPWYEPIYL GGVFQLEKGD QLSAEVNLPK YLDFAESGQV YFGVIAL
Storage	Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.
Pathways	Adipocytokine signaling pathway; Adipogenesis; African trypanosomiasis; Allograft rejection; Alzheimer"s disease; Amoebiasis; Antigen processing and presentation; Apoptosis; Asthma; Cytokine-cytokine receptor interaction; Cytokines and Inflammatory Response (BioCarta); Death Receptor Signalling; Diabetes pathways; Dilated cardiomyopathy; Extrinsic Pathway for Apoptosis; Fc epsilon RI signaling pathway; Tuberculosis; Type I diabetes mellitus; Type II diabetes mellitus

GENE INFORMATION

Gene Name	Tnf tumor necrosis factor [<i>Mus musculus</i>]
Official Symbol	Tnf
Synonyms	Tnf; tumor necrosis factor; DIF; Tnfa; TNFSF2; Tnfsf1a; TNFalpha; MGC151434; TNF-alpha; TNF-a; TNF alpha; cachectin; tumor necrosis factor alpha;tumor necrosis

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factor-alpha; tumor necrosis factor ligand superfamily member 2; APC1 protein; cachectin; TNF superfamily, member 2; TNFA; TNF, macrophage-derived; TNF, monocyte-derived; tumor necrosis factor-alpha; tumor necrosis factor (TNF superfamily, member 2); Cachectin

Gene ID [21926](#)

mRNA Refseq [NM_013693](#)

Protein Refseq [NP_038721](#)


UniProt ID [P06804](#)

Chromosome Location 17 B1; 17 19.06 cM


Function cytokine activity; identical protein binding; protease binding; protein binding; transcription regulatory region DNA binding; tumor necrosis factor receptor binding

PDBrendering based on 1TNF.



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