



Recombinant Mouse TNF α
(Tumor Necrosis Factor alpha)

Catalog Number: 200-31
Accession Number: P06804

Specifications and Uses:

Alternate Names: TNFSF2, Cachectin, DIF, Necrosin, Cytotoxin, Cachexin, TNF

Description:

Tumor Necrosis Factor alpha (TNF α) is an inflammatory cytokine secreted by macrophages, monocytes, neutrophils, T cells, NK-cells following their stimulation by bacterial LPS. TNF α activates signals through two receptors, TNF-R1, which is expressed on most cell types, and TNF-R2, which is expressed mainly on immune cells. TNF α can have many functions including, to stimulate of phagocytosis in macrophages, to chemoattract neutrophils, to increase insulin resistance and to induce fever. Recombinant mouse TNF α is a non-glycosylated protein, containing 156 amino acids, with a molecular weight of 17.3 kDa.

Source: *E.coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant mouse TNF α is lyophilized from 50 mM Tris-HCl, pH 8, and 20 mM NaCl. Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. 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.

Protein Content and Purity (typically \geq 98%) determined by:

Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:

Measured by kinetic LAL analysis and is typically \leq 1 EU/ μ g protein.

Biological Activity:

The activity is determined by the cytolysis of mouse L929 cells in the presence of Actinomycin D and is typically less than 100 pg/mL.

AA Sequence:

MLRSSSQNSS DKPVAHVVAN HQVEEQLEWL SQRANALLAN GMDLKDNLV VPADGLYLVY SQVLFKGQGC
PDYVLLTHTV SRFAISYQEK VNLLSAVKSP CPKDTPEGAE LKPWYEPIYL GGVFQLEKGD QLSAEVNLPK
YLDFAESGQV YFGVIAL

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

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