Rat TNF-alpha / TNFA Protein

Catalog Number: 80045-RNAE

General Information

Gene Name Synonym:

TNF

Protein Construction:

A DNA sequence encoding the mature form of rat TNFα (P16599) (Leu 80-Leu 235) was expressed and purified, with an initial Met at the N-terminus.

Source: Rat

Expression Host: E. coli

QC Testing

Purity: > 93 % as determined by SDS-PAGE

Bio Activity:

Measured in a cytotoxicity assay using L929 mouse fibrosarcoma cells in the presence of metabolic inhibitor actinomycin D. The ED_{50} for this effect is typically 1-6 pg/ml.

Endotoxin:

Please contact us for more information.

Predicted N terminal: Met

Molecular Mass:

The recombinant rat TNFα consists of 157 amino acids and has a calculated molecular mass of 17.4 kDa. It migrates as an approximately 15.9 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

Protein Description

Tumor necrosis factor alpha (TNF-alpha), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily, and is a multifunctional molecule involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. Two receptors, TNF-R1 (TNF receptor type 1; CD120a; p55/60) and TNF-R2 (TNF receptor type 2; CD120b; p75/80), bind to TNF-alpha. TNF-alpha protein is produced mainly by macrophages, and large amounts of this cytokine are released in response to lipopolysaccharide, other bacterial products, and Interleukin-1 (IL-1). TNF-alpha is involved in fighting against the tumorigenesis, thus, is regarded as a molecular insight in cancer treatment.TNF-alpha Protein & Antibody

References