

Canine TNF-alpha / TNFA / TNFSF1A Protein



Sino Biological
Biological Solution Specialist

Catalog Number: 70003-DNAE

General Information

Gene Name Synonym:

TNF

Protein Construction:

A DNA sequence encoding the soluble form of canine TNF α (NP_001003244.4) (Val 77-Leu 233) was expressed, with an initial Met at the N-terminus.

Source: Canine

Expression Host: E. coli

QC Testing

Purity: > 96 % as determined by SDS-PAGE

Bio Activity:

1. Immobilized Recombinant Canine TNF-alpha / TNFA / TNFSF1A Protein (Cat: 70003-DNAE) at 1 μ g/mL (100 μ L/well) can bind Anti-TNF α (Research Grade Adalim[®]mab Biosimilar), the EC₅₀ is 0.6-4.0 ng/mL (Routinely tested).
2. Measured in a cytotoxicity assay using L-929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is typically 0.01-0.08 ng/ml.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant canine TNF α consists of 158 amino acids and has a calculated molecular mass of 17.3 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Formulation:

Lyophilized from sterile 50 mM Tris, 500 mM NaCl, pH 8.0.

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

Storage:

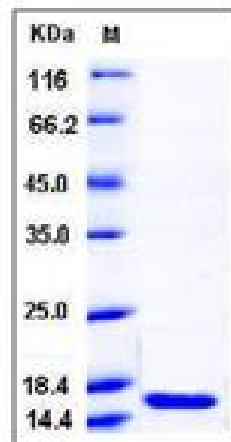
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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

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