

For Research Use Only

Recombinant Canine TNF-alpha protein (rFc Tag)



Catalog Number: Eg4546

Basic Information

Species:
Canine

Purity:
>90 %, SDS-PAGE

Tag:
rFc Tag

Technical Specifications

Purity:

>90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/μg protein, LAL method

Source:

HEK293-derived Canine TNF-alpha protein Val77-Leu233 (Accession# P51742) with a rabbit IgG Fc tag at the N-terminus.

GeneID:

403922

Accession:

P51742

Predicted Molecular Mass:

44.5 kDa

SDS-PAGE:

43-48 kDa, reducing (R) conditions

Formulation:

Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

TNF, as also known as TNF-alpha, or cachectin, is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. It is expressed as a 26 kDa membrane bound protein and is then cleaved by TNF-alpha converting enzyme (TACE) to release the soluble 17 kDa monomer, which forms homotrimers in circulation. It is produced chiefly by activated macrophages, although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells, neutrophils, mast cells, eosinophils, and neurons. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer.

References

1. Kirkegaard T. et al. (2004) Clin Exp Immunol. 135(1):146-53.
2. Andrade P. et al. (2011) Neurol Sci. 32(5):757-71.
3. Popa C. et al. (2007) J Lipid Res. 48(4):751-62.

Synonyms

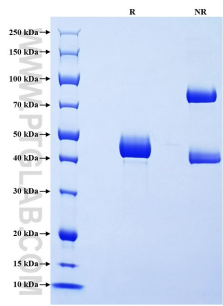
TNF-a, TNF, TNFA, TNFSF2, Tumor necrosis factor

For technical support and original validation data for this product please contact

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Selected Validation Data



Purity of Recombinant Canine TNF-alpha was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.