Recombinant Mouse TNF-alpha Protein

Catalog No.: RP01071 Recombinant 2 Publications

Sequence Information

Background

Species Gene ID Swiss Prot HEK293 cells 21926 P06804

Tags C-His

Synonyms

DIF; Tnfa; TNF-a; TNFSF2; Tnlg1f; Tnfsf1a; TNFalpha; TNF-alpha; TNF

Product Information

Purification Source HEK293 cells > 87% by SDS-PAGE.

Endotoxin

< 0.1 EU/µg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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www.abclonal.com

Basic Information

Description

Recombinant Mouse TNF-alpha Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu80-Leu235) of mouse TNF-alpha (Accession #NP_038721.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

1.Recombinant Mouse TNF-α protein was measured by NF-κB reporter assay in HEK293 cells. The ED₅₀ for this effect is 40-200 pg/mL.|2.Measured by its binding ability in a functional ELISA. Immobilized Mouse TNF- α at 2 µg/mL (100 µL/well) can bind Mouse TNFRSF1B with a linear range of 0.02-0.77 ng/mL.|3.Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is 0.025-0.1 pg/mL.

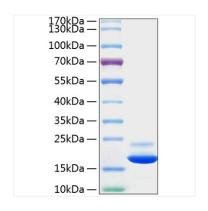
Storage

Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

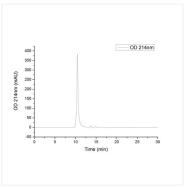
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.



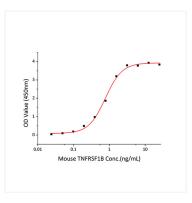
Validation Data



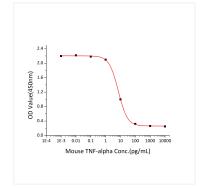
Recombinant Mouse TNF-alpha Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 18 kDa.



The purity of Mouse TNF-alpha Protein (Cat.RP01071) was greater than 95% as determined by SEC-HPLC.



Immobilized Recombinant Mouse TNF- α at 2 µg/mL (100 µL/well) can bind Mouse TNFRSF1B with a linear range of 0.02-0.77 ng/mL.



Recombinant Mouse TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cell line in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is typically 3.55-14.2 pg/mL, corresponding to a specific activity of $7.04 \times 10^7 \sim 2.82 \times 10^8$ units/mg.