RP01702

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Recombinant Mouse TNF-alpha Protein

Catalog No.: RP01702 Recombinant 3 Publications

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	21926	P06804

Tags
No tag

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

Product Information

Source	Purification
HEK293 cells	≥ 90 % as determined 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.

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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Background

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.

Basic Information

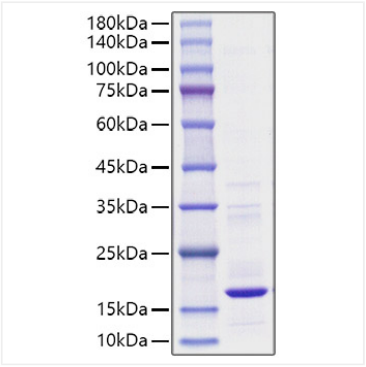
Description
Recombinant Mouse TNF-alpha Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu80-Leu235) of mouse TNF-alpha/TNF (Accession #NP_038721.1.) fused with no additional amino acid.

Bio-Activity
Recombinant Mouse TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED_{50} for this effect is typically 29-116 pg/mL, corresponding to a specific activity of 8.62×10^{6}-3.45×10^{7} units/mg.

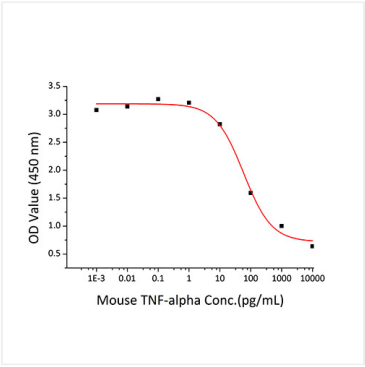
Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Mouse TNF-alpha Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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