

Cynomolgus TNF alpha Protein

Cat. No. TNF-CM10A

Description

Source	Recombinant Cynomolgus TNF alpha Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Val77-Leu233.
Accession	P79337
Molecular Weight	The protein has a predicted MW of 18.35 kDa. Due to glycosylation, the protein migrates to 19-25 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

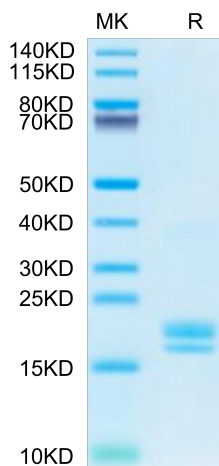
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Tumor necrosis factor alpha (TNF-alpha), also known as cachectin and TNFSF2, is the prototypic ligand of the TNF superfamily. It is a pleiotropic molecule that plays a central role in inflammation, immune system development, apoptosis, and lipid metabolism. Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

Assay Data

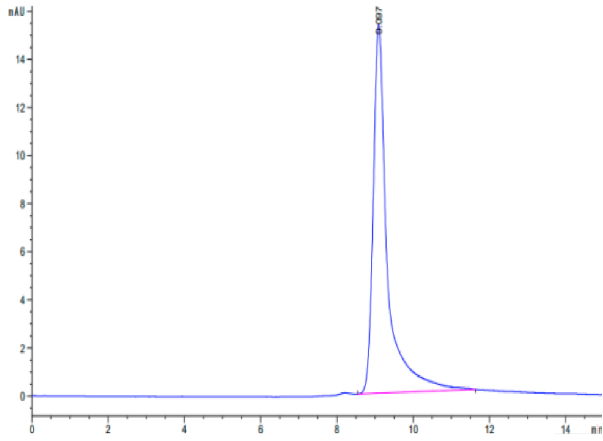
Tris-Bis PAGE



Cynomolgus TNF alpha on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



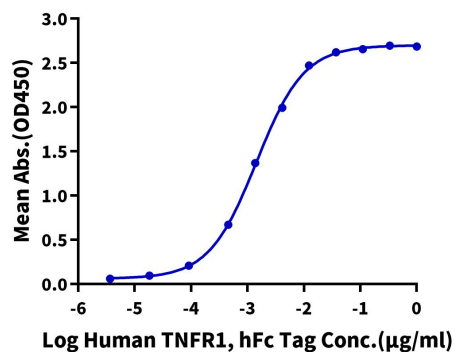
The purity of Cynomolgus TNF alpha is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

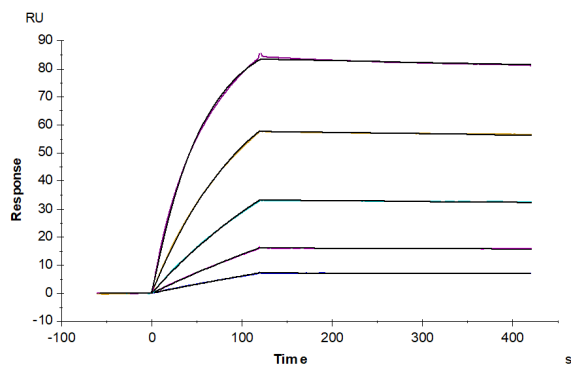
Cynomolgus TNF alpha, His Tag ELISA

0.1µg Cynomolgus TNF alpha, His Tag Per Well



Immobilized Cynomolgus TNF alpha, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human TNFR1, hFc Tag with the EC50 of 1.4ng/ml determined by ELISA (QC Test).

SPR Data



Cynomolgus TNFR1, His Tag immobilized on CM5 Chip can bind Cynomolgus TNF alpha, His Tag with an affinity constant of 0.23 nM as determined in SPR assay (Biacore T200).