

# Biotinylated Human TNF alpha Protein

Cat. No. TNF-HM40AB

## Description

<b>Source</b>	Recombinant Biotinylated Human TNF alpha Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Val77-Leu233.
<b>Accession</b>	P01375
<b>Molecular Weight</b>	The protein has a predicted MW of 20.3 kDa. Due to glycosylation, the protein migrates to 21-24 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state 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/TNFR2. 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



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

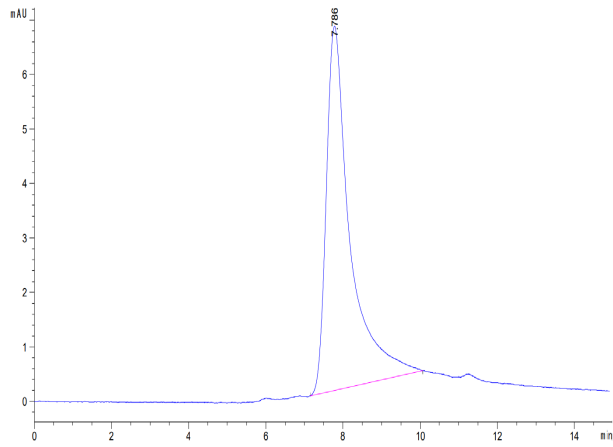
### SEC-HPLC

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## Assay Data



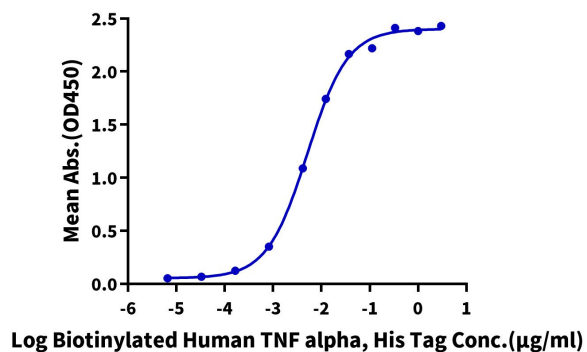
The purity of Biotinylated Human TNF alpha is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Biotinylated Human TNF alpha, His Tag ELISA**

0.05µg Human TNFR2, mFc Tag Per Well



Immobilized Human TNF R2, mFc Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Human TNF alpha, His Tag with the EC50 of 5.1ng/ml determined by ELISA.