Biotinylated Mouse TNF-alpha Protein, His,Avitag™, active trimer (MALS verified)

Catalog # TNA-M82E9

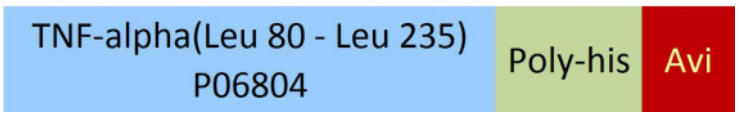
Synonym

DIF,TNF-alpha,TNFA,TNFSF2,cachexin,cachectin,TNFα

Source

Biotinylated Mouse TNF-alpha Protein, His,Avitag(TNA-M82E9) is expressed from human 293 cells (HEK293). It contains AA Leu 80 - Leu 235 (Accession # P06804).
Predicted N-terminus: Leu 80

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 20.2 kDa. The protein migrates as 20-21 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

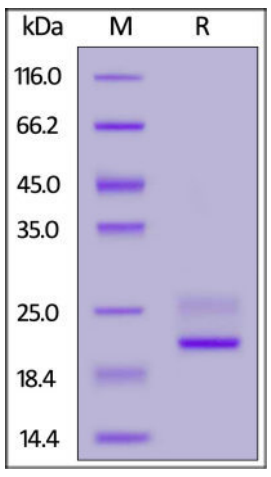
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

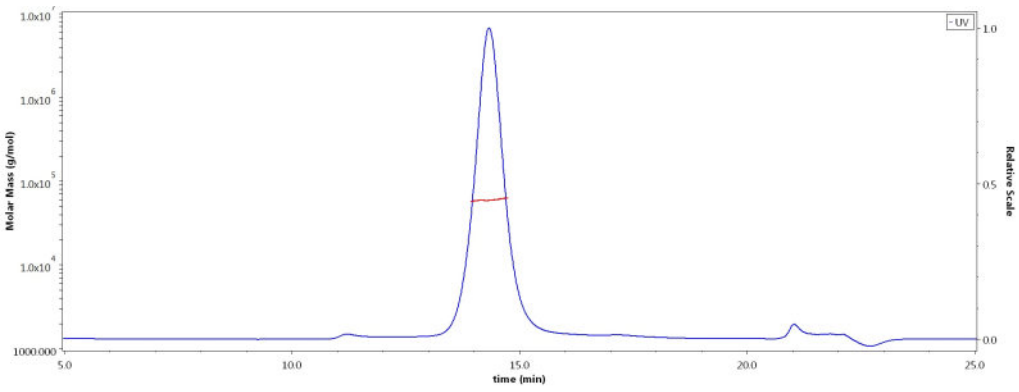
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



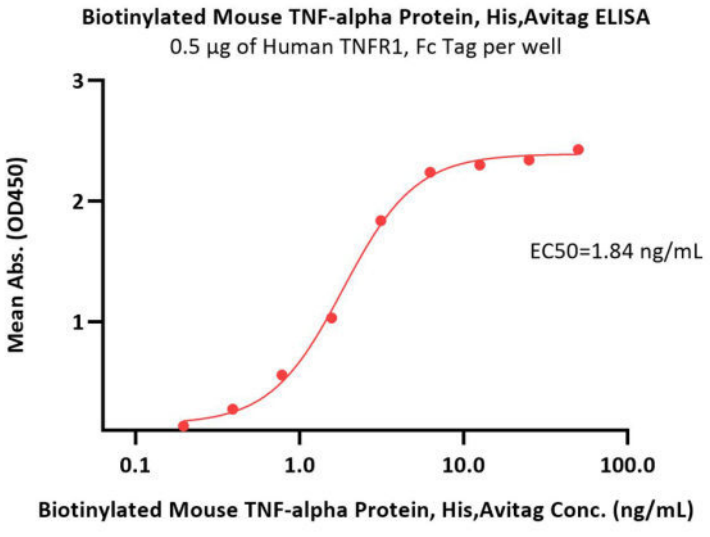
Biotinylated Mouse TNF-alpha Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated Mouse TNF-alpha Protein, His,Avitag (Cat. No. TNA-M82E9) is more than 95% and the molecular weight of this protein is around 55-70 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human TNFR1, Fc Tag (Cat. No. TN1-H5251) at 5 μg/mL (100 μL/well) can bind Biotinylated Mouse TNF-alpha Protein, His,Avitag (Cat. No. TNA-M82E9) with a linear range of 0.1-3 ng/mL (QC tested).

Background

Tumor necrosis factor alpha (TNFα) is a cytokine produced primarily by monocytes and macrophages. It is found in synovial cells and macrophages in the tissues.The primary role of TNFα is in the regulation of immune cells. TNFα is able to induce apoptotic cell death, to induce inflammation, and to inhibit tumorigenesis and viral replication. Dysregulation of TNFα production has been implicated in a variety of human diseases, including major depression, Alzheimers disease and cancer. Recombinant TNFα is used as an immunostimulant under the INN tasonermin. TNFα can be produced ectopically in the setting of malignancy and parallels parathyroid hormone both in causing secondary hypercalcemia and in the cancers with which excessive production is associated.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.