



Synonym

Transforming growth factor-alpha

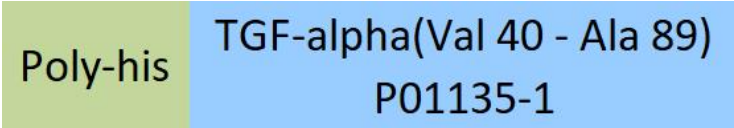
Source

Human TGF-alpha Protein, His Tag, premium grade(TGA-H5141) is expressed from E. coli cells. It contains AA Val 40 - Ala 89 (Accession # [P01135-1](#)).

Predicted N-terminus: His

*It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.*

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 7.4 kDa. The protein migrates as 11 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 0.01 EU per µg by the LAL method / rFC method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>90% as determined by SDS-PAGE.

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

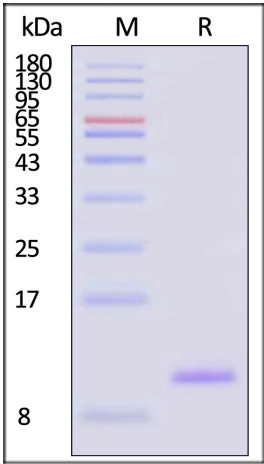
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

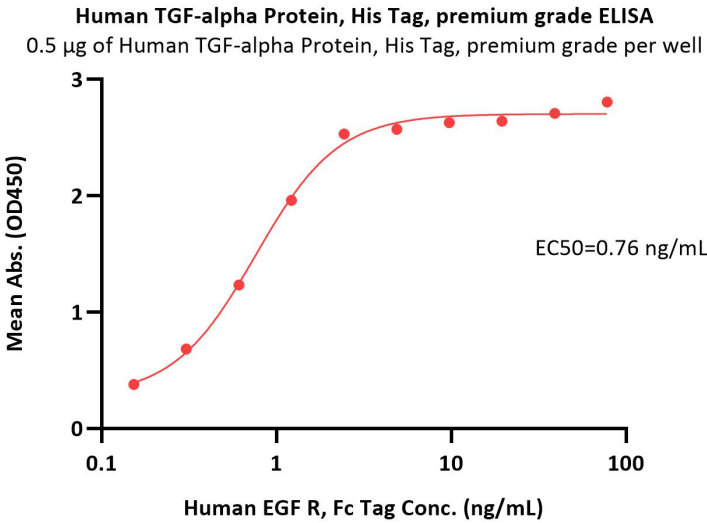
SDS-PAGE



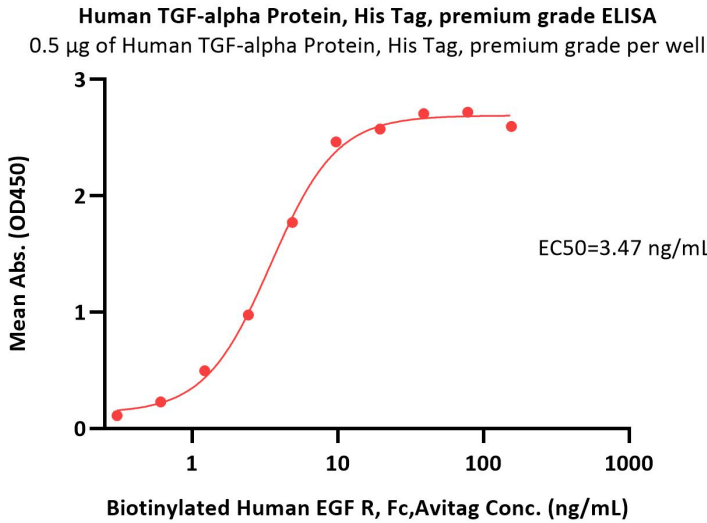
Human TGF-alpha Protein, His Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA





Immobilized Human TGF-alpha Protein, His Tag, premium grade (Cat. No. TGA-H5141) at 5 µg/mL (100 µL/well) can bind Human EGF R, Fc Tag (Cat. No. EGR-H5252) with a linear range of 0.2-2 ng/mL (QC tested).



Immobilized Human TGF-alpha Protein, His Tag, premium grade (Cat. No. TGA-H5141) at 5 µg/mL (100 µL/well) can bind Biotinylated Human EGF R, Fc,Avitag (Cat. No. EGR-H82F8) with a linear range of 0.3-10 ng/mL (Routinely tested).

Background

TGF-alpha is a normal physiological ligand for the EGF receptor. TGF-α and the EGF receptor are expressed in many developing and adult tissues, where TGF-α has been implicated in cell migration, growth, and differentiation.

