

## General Information

### Gene Name Synonym

Transforming growth factor alpha; EGF-like TGF; TGF type 1

### Protein Construction

A DNA sequence encoding the human TGFA (P01135-1) (Val40-Ala89) was expressed and purified.

### Organism

Human

### Expression Host

E. coli

## QC Testing

### Activity

1. Measured by its binding ability in a functional ELISA. Immobilized human TGFA (cat:501636) at 10 µg/ml (100 µl/well) can bind human EGFR-Fc (Cat:504095). The  $EC_{50}$  of human EGFR-Fc (Cat:504095) is 20-60 ng/ml.

2. Measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblast cells.

The  $ED_{50}$  for this effect is 0.1-0.5ng/mL.

### Purity

> 90 % as determined by SDS-PAGE

### Endotoxin

Please contact us for more information.

### Stability

Samples are stable for up to twelve months from date of receipt at -70°C

### Predicted N terminal

Met

### Molecular Mass

The recombinant human TGFA consists of 50 amino acids and has a predicted molecular mass of 5.6 kDa. The apparent molecular mass of it is approximately 13 kDa in SDS-PAGE under reducing conditions.

### Formulation

Lyophilized from sterile 50 mM Tris, 100 mM NaCl, pH 8.0.

1. 5 % trehalose and mannitol are added as protectants before lyophilization.

2. Please contact us for any concerns or special requirements.

## Usage Guide

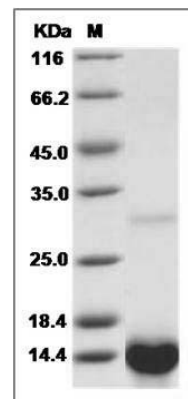
### Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

### Reconstitution

Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

### SDS-PAGE



Human TGFA / TGF-alpha Protein SDS-PAGE