

# Human TGF alpha protein, His tag (active)

**Cat. No. GTX00100-pro**

**Application** Functional Assay

**Species** Human

**Package**

10 µg

## APPLICATION

### Application Note

Transforming growth factor alpha (TGF-α), a ligand for the epidermal growth factor receptor, which activates a signaling pathway for cell proliferation, differentiation and development. To test the effect of TGF-α on cell proliferation of 3T3 fibroblasts, 3T3 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of TGF-α. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell proliferation of 3T3 cells after incubation with TGF-α for 72h observed by inverted microscope. And TGF-α significantly promoted cell proliferation of 3T3 cells. The ED<sub>50</sub> for this effect is typically 0.6198-8.210 ng/ml.

**Observed MW** 15 kDa.

## PROPERTIES

**Form** Lyophilized powder

**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

**Preservative** ProClin 300

**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

**Region/Sequence** N-terminal His-Tag; Glu24~Ala98 (NP\_001093161.1)

**Expression System** E. coli

**Purity** > 97%

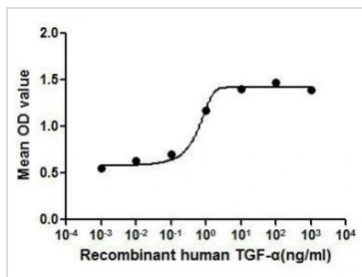
**Endotoxin** < 1 EU/µg

**Conjugation** Unconjugated

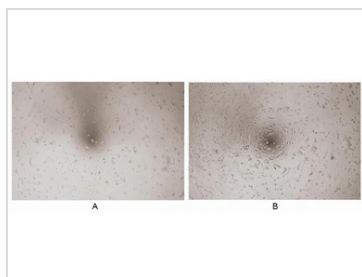
**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



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**DATA IMAGES**

**GTX00100-pro Functional Assay Image**

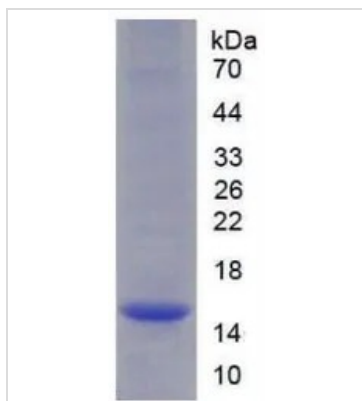
The dose effect curve of GTX00100-pro Human TGF alpha protein (active) on 3T3 cells. After incubation of Human TGF alpha protein (active) for 72 hrs, cell proliferation was measured by Cell Counting Kit-8 (CCK-8).


**GTX00100-pro Functional Assay Image**

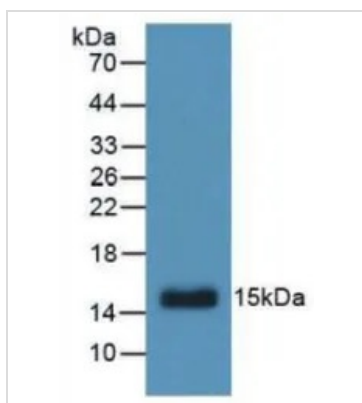
Cell proliferation effect of GTX00100-pro Human TGF alpha protein (active).

(A) Unstimulated 3T3 cells cultured in serum-free DMEM for 72hrs.

(B) 3T3 cells cultured in DMEM, stimulated with 1 ng/ml TGF alpha for 72hrs.


**GTX00100-pro Image**

SDS-PAGE analysis of GTX00100-pro Human TGF alpha protein (active).


**GTX00100-pro Image**

WB analysis of GTX00100-pro Human TGF alpha protein (active).



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