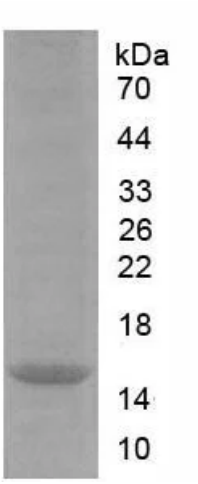
Active Transforming Growth Factor Alpha (TGFa)

Catalog#:PEH12208

概述（Summary）

别称（Alternative Names）	ETGF; TGF-A; Protransforming Growth Factor alpha; EGF-Like TGF
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Glu24-Ala98】
Accession #	P01135
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	11.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	TGF alpha is a mitogenic polypeptide that is able to bind to the EGF receptor/EGFR and to act synergistically with TGF beta to promote anchorage-independent cell proliferation in soft agar.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

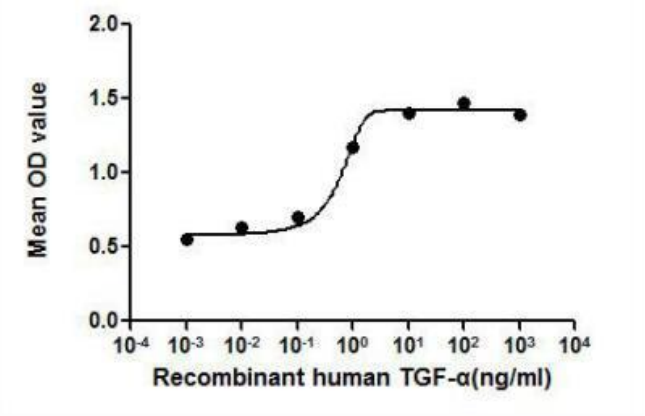


Figure 2. The dose-effect curve of TGF-α on 3T3 cells.

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, 10μL 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 was shown in Figure 1. The dose-effect curve of TGF-α was shown in Figure 2. It was obvious that TGF-α significantly promoted cell proliferation of 3T3 cells. The ED50 for this effect is typically 0.6198 to 8.210ng/mL.



A B

Figure 1. Cell proliferation of 3T3 cells after stimulated with TGF-α.

(A) 3T3 cells cultured in DMEM, stimulated with 1ng/mL TGF-α 72h;

(B) Unstimulated 3T3 cells cultured in serum-free DMEM for 72h.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.