

TGF-α

Catalog # PVGS1318

Specification

TGF-α - Product Information

Primary Accession
Species
Human

P01135

Sequence

Val40-Ala89

Purity

> 95% as analyzed by SDS-PAGE
br>> 95% as analyzed by HPLC

Endotoxin Level

< 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED₅₀ < 0.4 ng/ml, measured in a cell proliferation assay using 3T3 cells.

Expression System

CHO

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O or PBS up to 100 µg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

TGF-α - Additional Information

Gene ID 7039

Other Names

Protransforming growth factor alpha, Transforming growth factor alpha, TGF-alpha, EGF-like TGF, ETGF, TGF type 1, TGFA

Target Background

Protransforming Growth Factor-alpha (TGF-alpha), also known as sarcoma growth factor, TGF-type I and ETGF, is a member of the EGF family of cytokines. It is expressed in monocytes, brain cells, keratinocytes and various tumor cells. ProTGF-alpha signals through EGFR and acts synergistically with TGF-beta to promote the proliferation of a wide range of epidermal and epithelial cells. It may



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function as either a membrane-bound ligand or a soluble ligand. Membrane-bound proTGF-alpha plays a role in cell-cell adhesion and juxtacrine stimulation of adjacent cells. The soluble form of the cytokine is released from the membrane-bound form by proteolytic cleavage and acts as a mitogen for cell proliferation.

TGF-α - Protein Information

Name TGFA

Function

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.

Cellular Location

[Transforming growth factor alpha]: Secreted, extracellular space

Tissue Location

Isoform 1, isoform 3 and isoform 4 are expressed in keratinocytes and tumor-derived cell lines

TGF-α - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TGF-α - Images