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TGF-α

Catalog # PVGS1318

Specification

TGF-α - Product Information

Primary Accession P01135

Species
Human

Sequence
Val40-Ala89

Purity
> 95% as analyzed by SDS-PAGE
> 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 ddH_2O 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

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