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TGF-α

Catalog # PVGS1477

Product Information

Primary Accession	P01135
Species	Human
Sequence	Val40-Ala89
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	ED_{50} ^{6} units/mg.
Expression System	E. coli
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 □g/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.

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	Transforming Growth Factor-alpha (TGF-α) , 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. TGF-α signals through EGFR and acts synergistically with TGF-beta to promote the proliferation of a wide range of epidermal and epithelial cells. TGF-α is a transforming growth factor that is a ligand for the epidermal growth factor receptor, which activates a signaling pathway for cell proliferation, differentiation and development. This protein may act as either a transmembrane-bound ligand or a soluble ligand. The biological actions of TGF-α and EGF are similar. For instance, TGF-α and EGF bind to the same receptor. When TGF-α binds to EGFR it can initiate multiple cell proliferation events.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.