Recombinant TGFA protein (His tag)

Catalog Number	539658
Synonyms	TGF-alpha; EGF-like TGF; ETGF; TGF type 1
Species	Human
Expression System	E. coli
Accession	P01135
Molecular Weight	Predictes a molecular mass of 9.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	24-98
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 24-98 aa (P01135) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein product features a 75-amino acid fragment (residues 24–98) of human Protransforming growth factor alpha, encompassing the functional EGF-like domain. It is designed as a specialized tool for researchers studying the mitogenic activity and receptor-binding properties of Transforming growth factor alpha (TGF-alpha) in cellular processes. Transforming growth factor alpha (TGF-alpha) is a mitogenic polypeptide derived from its precursor, Protransforming growth factor alpha, through cleavage. In its mature form, TGF-alpha binds to the epidermal growth factor receptor (EGFR) and acts synergistically with TGF beta to promote anchorage-independent cell proliferation. The full-length precursor is a single-pass type I membrane protein, while the cleaved TGF-alpha is secreted into the extracellular space, where it mediates key signaling pathways involved in cell growth and development. This fragment, covering the EGF-like domain, allows focused investigation into these specific functional interactions.