

Product datasheet for **TP728283M**

Recombinant TGF alpha (Transforming growth factor alpha), Human

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant TGF alpha (Transforming growth factor alpha), Human
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MVSHFNDCPDSHTQFCFHGTCRFLVQEDKPACVCHSGYVGARCEHADLLA with polyhistidine tag at the C-terminus.
Tag:	His Tag (C-term)
Predicted MW:	The protein has a calculated MW of 6.49 kDa. The protein migrates as 7 kDa under reducing condition (SDS-PAGE analysis).
Purity:	>98% as determined by SDS-PAGE.
Buffer:	The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0.
Bioactivity:	Measure by its ability to induce 3T3 cells proliferation. The ED ₅₀ for this effect is <0.2 ng/mL. The specific activity of recombinant human TGF alpha is > 5 x 10 ⁶ IU/mg.
Endotoxin:	<0.1 EU per 1 µg of the protein by the LAL method.
Reconstitution Method:	Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. In some experiments, it recommends to add 10 mM HCl when reconstitute lyophilized protein. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.
Applications:	Cell culture
Storage:	Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.
UniProt ID:	P01135
Synonyms:	Sarcoma growth factor, TGF-type I, ETGF, TGFA



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Summary:

Transforming Growth Factors alpha (TGF- α) is a 5.68 kDa member of the epidermal Growth Factors with 51 amino acid residues. TGF- α is mainly expressed from brain, skin, epithelial cell (pancreatic endocrine cells, urothelial cells, oligodendrocyte precursor cells, etc.). TGF- α is a regulator of cell proliferation and differentiation via bind to the EGFR and to act synergistically with TGF β . TGF- α also associates with myriad forms of cancer.