

## Product datasheet for **TP728283**

### Recombinant TGF alpha (Transforming growth factor alpha), Human

#### Product data:

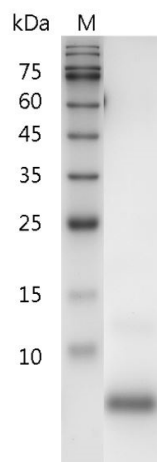
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| <b>Product Type:</b>                         | Recombinant Proteins   |
| <b>Description:</b>                          | Recombinant TGF alpha (Transforming growth factor alpha), Human  |
| <b>Species:</b>                              | Human  |
| <b>Expression Host:</b>                      | E. coli  |
| <b>Expression cDNA Clone or AA Sequence:</b> | MVSHFNDCPDSHTQFCFHGTCRFLVQEDKPACVCHSGYVGARCEHADLLA with polyhistidine tag at the C-terminus.   |
| <b>Tag:</b>                                  | His Tag (C-term)   |
| <b>Predicted MW:</b>                         | The protein has a calculated MW of 6.49 kDa. The protein migrates as 7 kDa under reducing condition (SDS-PAGE analysis).   |
| <b>Purity:</b>                               | >98% as determined by SDS-PAGE.  |
| <b>Buffer:</b>                               | The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0.   |
| <b>Bioactivity:</b>                          | Measure by its ability to induce 3T3 cells proliferation. The ED <sub>50</sub> for this effect is <0.2 ng/mL. The specific activity of recombinant human TGF alpha is > 5 x 10 <sup>6</sup> IU/mg.   |
| <b>Endotoxin:</b>                            | <0.1 EU per 1 µg of the protein by the LAL method.   |
| <b>Reconstitution Method:</b>                | Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> 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. |
| <b>Applications:</b>                         | Cell culture   |
| <b>Storage:</b>                              | 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.   |
| <b>UniProt ID:</b>                           | <a href="#">P01135</a>   |
| <b>Synonyms:</b>                             | Sarcoma growth factor, TGF-type I, ETGF, TGFA  |



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**Summary:**

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

**Product images:**

SDS- PAGE analysis of recombinant human TGF alpha