

## TGF- $\alpha$ , Human

**Cat. No.:** Z03151-5

**Size:** 5.0  $\mu$ g

**Synonyms:** Transforming Growth Factor- $\alpha$ ,  
Sarcoma growth factor, TGF-type I, ETGF

### Description:

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.

### Amino Acid Sequence:

00001 VVSHFNDPCD SHTQFCFHGT CRFLVQEDKP ACVCHSGYVG  
00041 ARCEHADLLA

**Source:** CHO

**Species:** Human

**Biological Activity:** ED<sub>50</sub> < 0.4 ng/ml, measured in a cell proliferation assay using 3T3 cells.

**Molecular Weight:** 8-10 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.

**Endotoxin Level:** < 0.2 EU/ $\mu$ g, determined by LAL method.

**Storage:** Lyophilized recombinant Human TGF-alpha remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human TGF-alpha should be stable up to 1 week at 4°C or up to 2 months at -20°C.