

Recombinant Human TGF alpha (Transforming Growth Factor alpha)

Product Description

TGF alpha is an EGF-related polypeptide growth factor that signals through the EGF receptor, and stimulates the proliferation of a wide range of epidermal and epithelial cells. It is produced by monocytes, keratinocytes, and various tumor cells. TGF alpha induces transformation anchorage independence in cultured cells. Human, murine and rat TGF alpha are cross-species reactive. Recombinant human TGF alpha is a 50 amino acid polypeptide (5.5 kDa) which shares approximately 40% sequence homology with EGF, including 6 conserved cysteine residues, which form 3 intramolecular disulfide bonds.

Typical Specifications

Species	Human
Expression	E. Coli Cell Expressed
Activity	Typically ≤ 0.2 ng/ml ED ₅₀
Purity	$\geq 98\%$
Endotoxin	< 1.0 EU/ μ g
Molecular Mass	5.5 kDa
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

The ED₅₀ as determined by the dose-dependent stimulation of thymidine uptake by BALB/c 3T3 cells is ≤ 0.2 ng/ml, corresponding to a specific activity of $\geq 5 \times 10^6$ units/mg.

AA Sequence

VVSHFNDCPD	SHTQFCFHGT	CRFLVQEDKP
ACVCHSGYVG	ARCEHADLLA	

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C .

Limited Use and Restrictions

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