



Recombinant Human TGF-beta3

20211104BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-107
Size:	10 µg
Lot. No.:	According to product label

Sequence

ALDTNYCFRN LEENCCVRPL YIDFRQDLGW KVVHEPKGYY
ANFCSGPCPY LRSADTTHST VLGLYNTLNP EASASPCVVP
QDLEPLTILY YVGRTPKVEQ LSNMVKSK CS

Database References

Protein RefSeq:	NP_003230
Uniprot ID:	P10600
mRNA RefSeq:	NM_003239

Scientific Background

Gene-ID (NCBI):	7043
Synonyms:	TGFB3; ARVD; TGF-beta3

The three mammalian isoforms of TGF-beta, TGF-beta1, beta2, and beta3, signal through the same receptor and elicit similar biological responses. They are multifunctional cytokines that regulate cell proliferation, growth, differentiation and motility, as well as synthesis and deposition of the extracellular matrix. They are involved in various physiological processes, including embryogenesis, tissue remodeling and wound healing. They are secreted predominantly as latent complexes, which are stored at the cell surface and in the extracellular matrix. The release of the biologically active TGF-beta isoform from a latent complex involves proteolytic processing of the complex and/or induction of conformational changes by proteins such as thrombospondin-1. The physiological role of TGF-beta3 is still unknown, but its expression pattern suggests a role in the regulation of certain development processes. Recombinant Human TGF-beta3 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond.

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & Coomassie stain
Structural Information	homodimer
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized (from 20% EtOH, 0.12% HAc)
Length (aa):	112
MW:	25 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in **10mM acetic acid** to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The ED₅₀ as determined by TGF-beta3's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is ≤ 0.05 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁷ units/mg.



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Handling/Applications

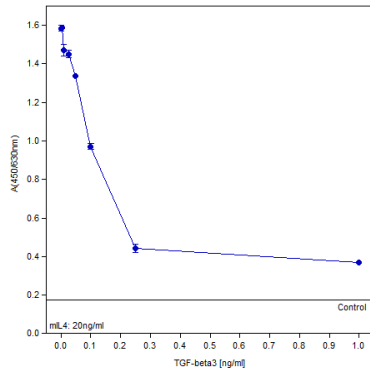


Fig. 1: Inhibition of mouse IL4-induced proliferation in HT2 A5E cells by TGF-beta3. HT2 A5E cells were stimulated with 20ng/ml mouse IL4 and human TGF-beta3 was added in increasing concentrations. Values are the means (\pm SD) of triplicate determinations.