

Active Recombinant Human Transforming Growth Factor, Beta 1

Cat. No. TGFB1-594H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human Transforming Growth Factor-beta 1 purified from Human Platelets having a molecular mass of 25kDa. The TGF-b 1 is purified by proprietary chromatographic techniques.
Species	Human
Source	Human
Description	Transforming growth factor betas (TGF Betas) mediate many cell-cell interactions that occur during embryonic development. Three TGFBetas have been identified in mammals. TGFBeta1, TGFBeta2 and TGFBeta3 are each synthesized as precursor proteins that are very similar in that each is cleaved to yield a 112 amino acid polypeptide that remains associated with the latent portion of the molecule.
Form	TGF-Beta1 protein was lyophilized from a solution containing 5mM Sodium Citrate (200µl) pH 3.5.
Purity	Greater than 97.0%.
Bio-activity	Stimulates the growth of NRK-1 cells in soft agar at concentrations ranging from 0.1 to 5ng/ml. Effective concentration ranges must be experimentally determined. Purified EGF and/or TGF-alpha at concentrations of at least 2ng/ml must be present for observation of the biological activity.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Physical Appearance	Sterile Filtered lyophilized powder.
Solubility	It is recommended to reconstitute lyophilized TGF-beta 1 in sterile 100µ5mM HCl, which can then be further diluted to the desired aliquot to 1ml of PBS containing 2mg/ml Albumin.
Storage	Lyophilized TGF-beta 1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TGF-beta 1 should be stored at 4°C between 2-7 days and for future use below -18°C. DO NOT RECONSTITUTE WITH NEUTRAL BUFFERS. DO NOT USE GLASS IMPLEMENTS OR EXTENSIVE MANIPULATIONS. PREVENT FREEZE THAW CYCLES.

GENE INFORMATION

Gene Name	TGFB1 transforming growth factor, beta 1 [Homo sapiens]
Official Symbol	TGFB1
Synonyms	TGFB1; transforming growth factor, beta 1; CED; LAP; DPD1; TGFB; TGFbeta; TGF-beta 1 protein; latency-associated peptide; Camurati-Engelmann disease; Transforming growth factor beta-1; TGF-beta-1; Latency-associated peptide; LAP
Gene ID	7040
mRNA Refseq	NM_000660
Protein Refseq	NP_000651
MIM	190180
UniProt ID	P01137

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Chromosome Location	19q13.1
Pathway	Cell cycle; Chronic myeloid leukemia; Colorectal cancer; Cytokine-cytokine receptor interaction; Hypertrophic cardiomyopathy (HCM); MAPK signaling pathway; Pancreatic cancer; Pathways in cancer; Renal cell carcinoma; TGF-beta signaling pathway; Hemostasis; Influenza Infection; Signaling by TGF beta
Function	growth factor activity; protein N-terminus binding; protein heterodimerization activity; protein homodimerization activity; transcription activator activity; type II transforming growth factor beta receptor binding
PDB rendering based on 1kla.	