Active Recombinant Human TGFB1

Cat. No. TGFB1-428H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	TGFB1 Human Recombinant produced in Human 293 cells is a homodimeric polypeptide chain containing 2 x 112 amino acids and having a total molecular mass of 25kDa. The TGFB1 is purified by proprietary chromatographic techniques.
Species	Human
Source	HEK293
Description	This gene encodes a member of the transforming growth factor beta (TGFB) family of cytokines, which are multifunctional peptides that regulate proliferation, differentiation, adhesion, migration, and other functions in many cell types. Many cells have TGFB receptors, and the protein positively and negatively regulates many other growth factors. The secreted protein is cleaved into a latency-associated peptide (LAP) and a mature TGFB1 peptide, and is found in either a latent form composed of a TGFB1 homodimer, a LAP homodimer, and a latent TGFB1-binding protein, or in an active form composed of a TGFB1 homodimer. The mature peptide may also form heterodimers with other TGFB family members. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease.
Form	Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized from a concentrated (1mg/ml) solution containing 10mM HCl & 50ug BSA per mg/ml of protein.
Bio-activity	The ED50, as measured by the dose-dependent inhibition of IL-4-induced

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

	proliferation of mouse HT-2 cells is typically 0.1-0.15ng/ml.
AA Sequence	ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS.
Purity	Greater than 98.0% as determined by SDS-PAGE.
Stability	Lyophilized TGFB1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TGFB1 Human should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Reconstitution	It is recommended to reconstitute the lyophilized TGFB1 in sterile 5mM HCl & 50ug/ml BSA at a concentration of 0.1mg/ml, which can then be further diluted to other aqueous solutions.

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

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

Protein Refseq	NP_000651
MIM	190180
UniProt ID	P01137
Chromosome Location	19q13.1
Pathway	ACE Inhibitor Pathway; Cardiac Progenitor Differentiation; Chagas disease (American trypanosomiasis)
Function	antigen binding; enzyme binding; growth factor 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