

Recombinant Human Transforming Growth Factor, beta 1

Cat. No. TGFB1-126H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human TGF- β 1 protein was expressed in E.coli and purified by using conventional chromatography techniques. MW=12.9 kDa (113aa).
Species	Human
Source	E.coli
ProteinLength	279-390 a.a.
Description	Transforming growth factor beta 1(TGF- β 1) is a polypeptide member of the transforming growth factor beta superfamily of cytokines. It is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. Many cells synthesize TGFb1 and almost all of them have specific receptors for it. It positively and negatively regulates many other growth factors. Also, TGF- β 1 plays an important role in bone remodeling, controlling the immune system, and shows different activities on different types of cell, or cells at different developmental stages.
Concentration	0.5 mg/ml (determined by Bradford assay).
Form	Liquid. In 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol.
Purity	> 95% by SDS-PAGE.
Endotoxin Level	< 1.0 EU per 1 μ g of protein (determined by LAL method).

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Amino Acid Sequence	MALDTNYCFS STEKNCCVRQ LYIDFRKDLG WKWIHEPKGY HANFCLGPCP YIWSLDTQYS KVLALYNQHN PGASAAPCCV PQALEPLPIV YYVGRKPKVE QLSNMIVRSC KCS.
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.
GENE INFORMATION	
Gene Name	TGFB1 transforming growth factor, beta 1 [Homo sapiens]
Synonyms	transforming growth factor, beta 1; CED; LAP; DPD1; TGFB; TGFbeta; TGFB1; TGF-beta 1 protein; latency-associated peptide; Camurati-Engelmann disease; TGF-beta-1; transforming growth factor-beta 1; diaphyseal dysplasia 1, progressive; TGF-beta 1 protein
Gene ID	7040
mRNA Refseq	NM_000660
Protein Refseq	NP_000651
MIM	190180
UniProt ID	P01137
Chromosome Location	19q13.1
Pathway	Cell cycle; Chronic myeloid leukemia; Cytokine-cytokine receptor interaction; Hypertrophic cardiomyopathy (HCM); MAPK signaling pathway; Pancreatic cancer;

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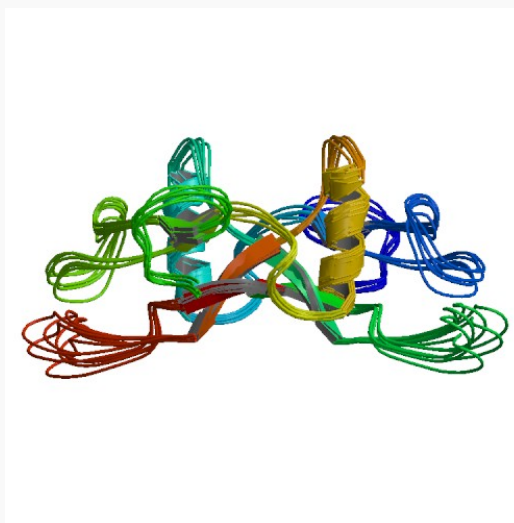
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Pathways in cancer; Renal cell carcinoma; TGF-beta signaling pathway; Influenza Infection; Signaling by TGF beta; Colorectal cancer; Hemostasis

Function

type II transforming growth factor beta receptor binding; transcription activator activity; protein homodimerization activity; protein heterodimerization activity; protein N-terminus binding; growth factor activity

PDB rendering based on 1kla.



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