

Product datasheet for **TP723781**

TGF beta 1 (TGFB1) (NM_000660) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human transforming growth factor, beta 1 (TGFB1)
Species:	Human
Expression Host:	CHO
Expression cDNA Clone or AA Sequence:	Human TGF-beta1, the region of Ala279-Ser390, from gene Accession# NM_000660
Tag:	Tag Free
Predicted MW:	12.8 kDa
Concentration:	lot specific
Purity:	>98%, as determined by Coomassie stained SDS-PAGE.
Buffer:	30% Acetonitrile, 0.1% TFA (trifluoroacetic acid)
Bioactivity:	The ED50 is from 0.05 to 0.2 ng/ml, corresponding to a specific activity of 0.5 to 2.0 x 10 ⁷ Units/mg.
Endotoxin:	Less than 0.1 EU/μg (<0.01 ng/μg) protein as determined by the LAL method
Storage:	Store at -80°C.
Stability:	Unopened vial can be stored between 2°C and 8°C for up to 2 weeks, at -20°C for up to 6 months, or at -70°C or below until the expiration date. Aliquots can be stored between 2°C and 8°C for up to one week and stored at -20°C or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
RefSeq:	NP_000651
Locus ID:	7040
UniProt ID:	P01137 , A0A499FJK2
RefSeq Size:	2583
Cytogenetics:	19q13.2
RefSeq ORF:	1170
Synonyms:	CED; DPD1; IBDIMDE; LAP; TGF-beta1; TGFB; TGFbeta



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Summary:

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGFB family members. This encoded protein regulates cell proliferation, differentiation and growth, and can modulate expression and activation of other growth factors including interferon gamma and tumor necrosis factor alpha. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease. [provided by RefSeq, Aug 2016]

Protein Families:

Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transcription Factors

Protein Pathways:

Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor interaction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Pancreatic cancer, Pathways in cancer, Renal cell carcinoma, TGF-beta signaling pathway

Product images: