

Product datasheet for **TP720760**

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:	Ala279-Ser390
Tag:	Tag Free
Predicted MW:	12.5 kDa
Concentration:	N/A
Purity:	>95% as determined by reducing SDS-PAGE
Buffer:	Lyophilized from a 0.2 um filtered solution of 50mM Glycine-HCl, 150mM NaCl, pH2.5.
Endotoxin:	Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)
Reconstitution Method:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in an acidic buffer, such as 4mM HCl, to a concentration less than 0.1-1.0 mg/ml. For longer term storage, it is recommended to further dilute in buffer with carrier protein, such 1 mg/ml BSA.
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Stability:	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
RefSeq:	<u>NP_000651</u>
Locus ID:	7040
UniProt ID:	<u>P01137</u>
RefSeq Size:	2583
Cytogenetics:	19q13.2
RefSeq ORF:	1170


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Synonyms: CED; DPD1; IBDIMDE; LAP; TGF-beta1; TGFB; TGFbeta

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