

Product datasheet for **TP723438**

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:	HEK293
Expression cDNA Clone or AA Sequence:	ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS
Tag:	Tag Free
Predicted MW:	25 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Lyophilized from a 0.2 µM filtered solution of 20mM phosphate buffer, 100mM NaCl, pH 7.2
Bioactivity:	ED50 was determined by TGF-beta1's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is less than or equal to 0.05 ng/ml, corresponding to a specific activity of > 2 x 10 ⁷ units/mg.
Endotoxin:	Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg)
Storage:	Store at -80°C.
Stability:	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_000651
Locus ID:	7040
UniProt ID:	P01137
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: