

Product datasheet for PH300973

TGF beta 1 (TGFB1) (NM_000660) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	TGFB1 MS Standard C13 and N15-labeled recombinant protein (NP_000651)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC200973
Predicted MW:	44.3 kDa
Protein Sequence:	>RC200973 protein sequence Red=Cloning site Green=Tags(s)

MPPSGLRLLLLLLPLLWLLVLTGRPAAGLSTCKTIDMELVKKRKEAIRGQILSKLRLASPPSQGEVPP
GPLPEAVLALYNSTRDRVAGESAEPEPEPEADYYAKEVTRVLMVETHNEIYDKFKQSTHSIYMFNTSEL
REAVPEPVLLSRAELRLLRLKLVQHVELYQKYSNNSWRVLSNRLLAPSDSPEWLSFDVTGVVRQWLSR
GGEIEGFRLSAHCSDSRDNTLQVDINGFTTGRRGDLATIHGMNRPFLMATPLERAQHLQSSRHRRAL
DTNYCFSSTEKNCCVRLYIDFRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGA
SAAPCCVPQALEPLPIVYVYVGRKPKVEQLSNMIVRSCCKS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000651
RefSeq Size:	2583
RefSeq ORF:	1170
Synonyms:	CED; DPD1; IBDIMDE; LAP; TGF-beta1; TGFB; TGFbeta
Locus ID:	7040



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UniProt ID: [P01137](#), [A0A499FJK2](#)

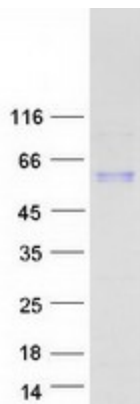
Cytogenetics: 19q13.2

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:



Coomassie blue staining of purified TGFB1 protein (Cat# [TP300973]). The protein was produced from HEK293T cells transfected with TGFB1 cDNA clone (Cat# [RC200973]) using MegaTran 2.0 (Cat# [TT210002]).