

## Product datasheet for RC200973L4V

## OriGene Technologies, Inc.

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## TGF beta 1 (TGFB1) (NM 000660) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** TGF beta 1 (TGFB1) (NM\_000660) Human Tagged ORF Clone Lentiviral Particle

Symbol: TGF beta 1

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

**Mammalian Cell** 

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_000660 **ORF Size:** 1170 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC200973).

Sequence:

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 000660.3

 RefSeq Size:
 2583 bp

 RefSeq ORF:
 1173 bp

 Locus ID:
 7040

 UniProt ID:
 P01137

 Cytogenetics:
 19q13.2

**Domains:** TGFb\_propeptide, TGF-beta

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





**Protein Pathways:** 

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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

MW:

44.3 kDa

**Gene 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]