

## Product datasheet for **KN200973LP**

### TGF beta 1 (TGFB1) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	TGF beta 1
Locus ID:	7040
Components:	<b>KN200973G1</b> , TGF beta 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) <b>KN200973G2</b> , TGF beta 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) <b>KN200973LPD</b> , donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette. <b>GE100003</b> , scramble sequence in pCas-Guide vector

**Disclaimer:** These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:** [NM\\_000660](#)

**UniProt ID:** [P01137](#)

**Synonyms:** CED; DPD1; LAP; 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]



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## Product images:

