

Product datasheet for KN317482

Tgfb1 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control

Donor DNA: GFP-puro

Symbol: Tgfb1 Locus ID: 21803

Components: KN317482G1, Tgfb1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN317482G2, Tgfb1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN317482D, donor DNA containing left and right homologous arms and GFP-puro functional

cassette.

GE100003, 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: <u>NM 011577</u>

UniProt ID: <u>P04202</u>

Synonyms: TGF-beta1; Tgfb; Tgfb-1; TGFbeta1

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 TGF-beta 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. Mice lacking a functional copy of this gene develop severe multifocal inflammatory

disease, yolk sac defects and colon cancer. [provided by RefSeq, Aug 2016]



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Product images:

