

## Product datasheet for **KN212624RB**

### TGF beta 2 (TGFB2) Human Gene Knockout Kit (CRISPR)

#### Product data:

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

**Donor DNA:** RFP-BSD

**Symbol:** TGF beta 2

**Locus ID:** 7042

**Components:** **KN212624G1**, TGF beta 2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)  
**KN212624G2**, TGF beta 2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)  
**KN212624RBD**, donor DNA containing left and right homologous arms and RFP-BSD 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:** [NM\\_001135599](#), [NM\\_003238](#), [NR\\_138148](#), [NR\\_138149](#)

**UniProt ID:** [P61812](#)

**Synonyms:** G-TSF; LDS4; TGF-beta2



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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 TGF-beta family members. Disruption of the TGF-beta/SMAD pathway has been implicated in a variety of human cancers. A chromosomal translocation that includes this gene is associated with Peters' anomaly, a congenital defect of the anterior chamber of the eye. Mutations in this gene may be associated with Loeys-Dietz syndrome. This gene encodes multiple isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]

**Product images:**
