

Product datasheet for **KN318517**

Txnip 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: Txnip
Locus ID: 56338
Components: **KN318517G1**, Txnip gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGTGGCCGGACGGGTAATAG
KN318517G2, Txnip gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGAGAAGGTGTACGGCAGC
KN318517D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 TTGGTATGGC TTCATTCAGC TCCGGTTCCC AACGATC

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_001009935](#), [NM_023719](#)

UniProt ID:

[Q8BG60](#)

Synonyms:

1200008J08Rik; AA682105; Hyplip1; Tbp-2; THIF; VDUP1

Summary:

May act as an oxidative stress mediator by inhibiting thioredoxin activity or by limiting its bioavailability. Interacts with COPS5 and restores COPS5-induced suppression of CDKN1B stability, blocking the COPS5-mediated translocation of CDKN1B from the nucleus to the cytoplasm. Inhibits the proteasomal degradation of DDIT4, and thereby contributes to the inhibition of the mammalian target of rapamycin complex 1 (mTORC1) (By similarity). Functions as a transcriptional repressor, possibly by acting as a bridge molecule between transcription factors and corepressor complexes, and over-expression will induce G0/G1 cell cycle arrest. Required for the maturation of natural killer cells. Acts as a suppressor of tumor cell growth.[UniProtKB/Swiss-Prot Function]

Product images:

