

## Product datasheet for KN318517LP

#### OriGene Technologies, Inc.

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## **Txnip Mouse 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: Txnip Locus ID: 56338

**Components:** KN318517G1, Txnip gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN318517G2, Txnip gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN318517LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

**RefSeq:** <u>NM 001009935</u>, <u>NM 023719</u>

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 GO/G1 cell cycle arrest. Required for the maturation of natural killer cells. Acts as a suppressor of tumor

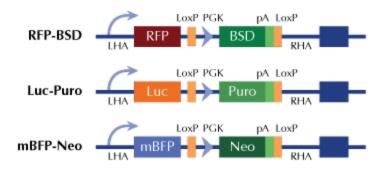
cell growth.[UniProtKB/Swiss-Prot Function]





# **Product images:**

### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter