

Product datasheet for **KN210804**

TXNIP Human 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:	10628
Components:	<p>KN210804G1, TXNIP gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCTGAAAAGGTGTACGGCAG</p> <p>KN210804G2, TXNIP gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCTGGCCGGTGATAGTGG</p> <p>KN210804D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

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

```
GACCCGGGAG AAGACGCTCA ACAGCCCCCT CCTTCCCCTC CTTCTCTCC TTCCTCTCT TCCCCCTCC
CTGCGCCGCT CCAGAGCGCA ACAACCATTT TCCCAGCCAG GAGCACACCG TGTCCACGCG CCACAGCGAT
CTCACTGATT GGTCTGGGCTC CTGGTAAACA AGGACCGGGC AGCCAATGGG AGGGATGTGC ACGAGGGCAG
CACGAGCCTC CGGGCCAGCG CTCGCGTGGC TCTTCTGGCC CGGGCTACTA TATAGAGACG TTTCCGCCTC
CTGCTTGAAA CTAACCCCTC TTTTCTCCA AAGGAGTCT TGTGGAGATC GGATCTTTTC TCCAGCAATT
GGGGGAAAGA AGGCTTTTTC TCTGAATTAG CTTAGTGTAA CCAGCGGCGT ATATTTTTTA GCGCCTTTT
CGAAAACCTA GTAGTTAATA TTCATTTGTT TAAATCTTAT TTTATTTTTA AGCTCAAAC GCTTAAGAAT
ACCTTAATTC CTTAAAGTGA AATAATTTTT TGCAAAGGGG TTTCTCGAT TTGGAGCTTT TTTTTCTTC
CACCGTCATT TCTAACTCTT AAAACCAACT CAGTTCCATC GGCTTGCGGA GTGGCTAAAG TGCTTTGGAT
GCAGGGATCC CAGCAGTGCA AACAGACTTC GGAGTACCTG CGCTATGAAG ACACGCTTCT TCTGGAAGAC
CAGCCAACAG GTAAGCGGCC CAATTCATTG TTGGAGGGTG AAAGCTGATT AGAGAAGAGA ATTGAATACA
CAAAACCTGT ACGAAATGTT TTAAGTTGCT CAGTTTGAGT GGTTTGAATT ACGTGTGTGT GCTTCCTTTT
TTCTGTTTTA ATTTGCAGAC ATTCTCCTCC CCCCCAAA AAAAGGGTGA TTTGTACAAT TTTTATGGT
GCTGTGTCTT AAAGGGGATC CTGAGGGGCG TTGCCTCGGG TAGTTAAAGT CTTATGTGTG CATAAGTTGC
TTATTCTTTG TCTACTTCTT ATTTGAGATG TTAGTAGAGA ACTGTCCTGG GTGAATCTTT CAGTATTGCA
GGGCTTGCA ACTTGCTGCC CGACAAAATA CATCAGAATT TCTCTTAAAG AACAATATGG GATGGATTA
AAAATATATA TATGGGATGA AATTGGGGGT ACTTCAATAC CTTGCATGCC ACCCAAGCAT TCCTTATCAC
ACAGATGCAT
```

GE100003, scramble sequence in pCas-Guide vector



[View online »](#)

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_001313972](#), [NM_006472](#)

UniProt ID: [Q9H3M7](#)

Synonyms: ARRDC6; EST01027; HHCPA78; THIF; VDUP1

Summary: This gene encodes a thioredoxin-binding protein that is a member of the alpha arrestin protein family. Thioredoxin is a thiol-oxidoreductase that is a major regulator of cellular redox signaling which protects cells from oxidative stress. This protein inhibits the antioxidative function of thioredoxin resulting in the accumulation of reactive oxygen species and cellular stress. This protein also functions as a regulator of cellular metabolism and of endoplasmic reticulum (ER) stress. This protein may also function as a tumor suppressor. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:

