

## Product datasheet for MR206196

### Txnip (NM\_023719) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Txnip (NM_023719) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Txnip
Synonyms:	1200008J08Rik; AA682105; Hyplip1; Tbp-2; THIF; VDUP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206196 representing NM_023719 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGATGTTCAAGAAGATCAAGTCTTTGAGGTGGTCTTCAACGACCCCGAGAAGGTGTACGGCAGCG  
GGGAGAAGGTGGCCGGACGGGTGATAGTGAAGTGTGTGAAGTTACCCGAGTCAAAGCCGTCAGGATCCT  
GGCTTGC GGCGTGGCCAAGGTCCTGTGGATGCAAGGGTCTCAGCAGTGCAAACAGACTTTGGACTACTTG  
CGCTATGAAGACACACTTCTCCTAGAAGAGCAGCCTACAGGTGAGAACGAGATGGTGATCATGAGGCCTG  
GAAACAAATATGAGTACAAGTTCGGCTTCGAGCTTCTCAAGGGCCCTGGGAACATCCTTTAAAGGAAA  
ATATGGTTGCGTAGACTACTGGGTGAAGCTTTTCTCGATCGCCCGAGCCAGCCAACTCAAGAGGCAAAAG  
AAAAACTCGAAGTGATGGATCTAGTGGATGTCAATACCCTGACTTAATGGCACCAGTGTCTGCCAAAA  
AGGAGAAGAAAGTTTCTGCATGTTCAATCCTGATGGACGTGTGTGAGTCTCTGCTCGAATTGACAGAAA  
AGGATTCTGTGAAGGTGATGACATCTCCATCCATGCCGACTTTGAGAACACGTGTTCCCGAATCGTGGTC  
CCCAAAGCGGCTATTGTGGCCCGACACACTTACCTTGCCAATGGCCAGACCAAAGTGTCACTCAGAAGC  
TGTCTCGGTGAGGCAATCACATTATCTCAGGACTTGCGCATCGTGGCGTGGCAAGAGCCTCAGAGT  
GCAGAAGATCAGACCATCCATCTGGGCTGCAACATCCTCAAAGTGAATACTCCTTGCTGATCTACGTC  
AGTGTCCCTGGCTCCAAGAAAGTCACTCTTGATCTGCCCTAGTGATTGGCAGCAGGTCGGGTCTGAGCA  
GCCGGACATCCAGCATGGCCAGCCGACGAGCTCTGAGATGAGCTGGATAGACCTAAACATCCCAGATAC  
CCCAGAAGCTCCTCCTTGTATATGGACATCATTCTGAAGATCACAGACTAGAGAGCCCCACCACCCCT  
CTGCTGGACGATGTGGACGACTCTCAAGACAGCCCTATCTTTATGTACGCCCTGAGTTCAGTTTCATGC  
CCCCACCACTTACTGAGGTGGATCCGTGCGTCCTTAACAACAACAACAACAACAACAACAGTGA  
G

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR206196 representing NM\_023719  
Red=Cloning site Green=Tags(s)

MVMFKKIKSFEVVFNDPEKVYGSGEKVAGRIVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTLDYLR  
 RYEDTLLEEQPTGENEMVIMRPGNKYEYKFGFELPQGPLGTSFKGKYGCVDYVWKAFDRPSQPTQEA  
 KNFEVMDLVDVNTPLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCGDDISIHADFENTCSRIVV  
 PKAAIVARHTYLANGQTKVFTQKLSSVRGNHIIISGTCASWRGKSLRVQKIRPSILGCNLIKVEYSLLIYV  
 SVPGSKKVIDLPLVIGSRSGLSRTSSMASRTSSEMSWIDLNIPDTPAAPP CYMDIIPEDHRLESPTTP  
 LLDDVDDSDSPIFMYAPEFQFMPPPTYTEVDPCVLNNNNNNNNNVQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_023719

**ORF Size:** 1191 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq Size:** 2806 bp

**RefSeq ORF:** 1191 bp

**Locus ID:** 56338

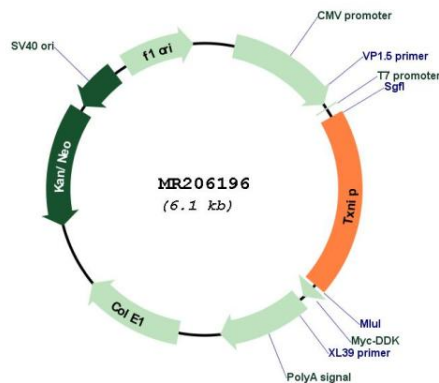
**UniProt ID:** [Q8BG60](#)

**Cytogenetics:** 3 41.93 cM

**MW:** 44.7 kDa

**Gene 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:



Circular map for MR206196