

## Product datasheet for **MG227021**

### **Txnip (NM\_001009935) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Txnip (NM\_001009935) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Txnip  
**Synonyms:** 1200008J08Rik; AA682105; Hyplip1; Tbp-2; THIF; VDUP1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG227021 representing NM\_001009935  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGATGTTCAAGAAGATCAAGTCTTTGAGGTGGTCTTCAACGACCCCGAGAAGGTGTACGGCAGCG  
 GGGAGAAGGTGGCCGACGGGTGATAGTGAAGTGTGAAGTTACCGAGTCAAAGCCGTCAGGATCCT  
 GGCTTGC GGCGTGGCCAAGGTCCTGTGGATGCAAGGGTCTCAGCAGTGCAAACAGACTTTGGACTACTTG  
 CGCTATGAAGACACACTTCTCCTAGAAGAGCAGCCTACAGGTGAGAACGAGATGGTGATCATGAGGCCTG  
 GAAACAAATATGAGTACAAGTTCGGCTTCGAGCTTCTCAAGGGCCCTGGGAACATCCTTTAAAGGAAA  
 ATATGGTTGCGTAGACTACTGGGTGAAGCTTTTCTCGATCGCCCGAGCCAGCCAACTCAAGAGGCAAAAG  
 AAAAATTCTGAAGTGATGGATCTAGTGGATGTCAATACCCCTGACTTAATGGCACCAGTGTCTGCCAAAA  
 AGGAGAAGAAAGTTTCTGCATGTTCAATCCTGATGGACGTGTGTGAGTCTCTGCTCGAATTGACAGAAA  
 AGGATTCTGTGAAGGTGATGACATCTCCATCCATGCCGACTTTGAGAACACGTGTTCCCGAATCGTGGTC  
 CCCAAAGCGGCTATTGTGGCCCGACACACTTACCTTGCCAATGGCCAGACCAAAGTTCCTCAAGAGC  
 TGTCTCGGTGAGGCAATCACATTATCTCAGGACTTGCGCATCGTGGCGTGGCAAGAGCCTCAGAGT  
 GCAGAAGATCAGACCATCCATCTGGGCTGCAACATCCTCAAAGTGAATACTCCTTGCTGATCTACGTC  
 AGTGTCCCTGGCTCCAAGAAAGTCACTCTTGATCTGCCCTAGTGATTGGCAGCAGGTCCGGTCTGAGCA  
 GCCGGACATCCAGCATGGCCAGCCGACGAGCTCTGAGATGAGCTGGATAGACCTAAACATCCCAGATAC  
 CCCAGAAGCTCCTCCTTGTATATGGACATCATTCTGAAGATCACAGACTAGAGAGCCCCACCACCCCT  
 CTGCTGGACGATGTGGACGACTCTCAAGACAGCCCTATCTTTATGTACGCCCTGAGTTCAGTTTCATGC  
 CCCCACCACTTACTGAGGTGGATCCGTGCGTCCTTAACAACAACAACAACAACAACAACAGTGC  
 A

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online >](#)

**Protein Sequence:** >MG227021 representing NM\_001009935  
Red=Cloning site Green=Tags(s)

MVMFKKIKSFEVVFNDPEKVYGSGEKVAGRIVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTLDYLR  
 RYEDTLLEEQPTGENEMVIMRPGNKYEYKFGFELPQGPLGTSFKGKYGCVYVWVKAFLDRPSQPTQEAK  
 KNFEVMDLVDVNTPDLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCGDDISIHADFENTCSRIVV  
 PKAAIVARHTYLANGQTKVFTQKLSVVRGNHIIISGTCASWRGKSLRVQKIRPSILGCNLIKVEYSLLIYV  
 SVPGSKKVIDLPLVIGSRSGLSRTSSMASRTSSEMWDLNIPTPEAPPCYMDIIPEDHRLESPTTP  
 LLDDVDDSDSPIFMYAPEFQFMPPPTYTEVDPCVLNNNNNNNNNVQ

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001009935

**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:** [NM\\_001009935.2](#), [NP\\_001009935.1](#)

**RefSeq Size:** 2801 bp

**RefSeq ORF:** 1194 bp

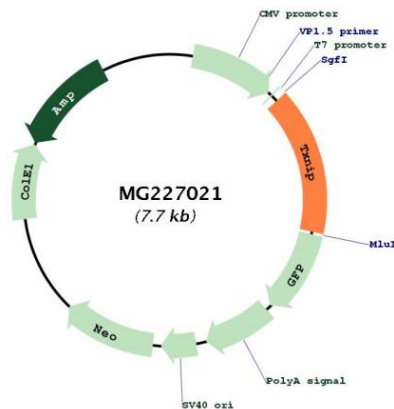
**Locus ID:** 56338

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

**Cytogenetics:** 3 41.93 cM

**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 MG227021