

Product datasheet for **RC210804**

TXNIP (NM_006472) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TXNIP (NM_006472) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TXNIP
Synonyms:	ARRDC6; EST01027; HHCPA78; THIF; VDUP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210804 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGTGATGTTCAAGAAGATCAAGTCTTTGAGGTGGTCTTTAACGACCCTGAAAAGGTGTACGGCAGTG
GCGAGAAGGTGGCTGGCCGGGTGATAGTGGAGGTGTGAAGTTACTCGTGTCAAAGCCGTTAGGATCCT
GGCTTGCGGAGTGGCTAAAGTGCCTTTGGATGCAGGGATCCAGCAGTGCAAACAGACTTCGGAGTACCTG
CGCTATGAAGACACGCTTCTTCTGGAAGACCAGCCAACAGGTGAGAATGAGATGGTGATCATGAGACCTG
GAAACAAATATGAGTACAAGTTCGGCTTTGAGCTTCTCAGGGGCCTCTGGGAACATCCTCAAAGGAAA
ATATGGGTGTGTAGACTACTGGGTGAAGCTTTTCTTGACCGCCGAGCCAGCCAACCAAGAGACAAA
AAAAACTTTGAAGTAGTGATCTGGTGGATGTCAATACCCTGATTTAATGGCACCTGTGTCTGCTAAAA
AAGAAAAGAAAGTTTCTGCATGTTCAATCCTGATGGGCGGGTGTCTGTCTCTGCTCGAATTGACAGAAA
AGGATTCTGTGAAGGTGATGAGATTTCCATCCATGCTGACTTTGAGAATACATGTTCCCGAATTGTGGTC
CCCAAAGCTGCCATTGTGGCCGCCACACTTACCTTGCCAATGGCCAGACCAAGGTGCTGACTCAGAAGT
TGTCATCAGTCAGAGGCAATCATATTATCTCAGGGACATGCGCATCATGGCGTGGCAAGAGCCTTCGGGT
TCAGAAGATCAGGCCTTCTATCCTGGGCTGCAACATCCTTCGAGTTGAATATTCCTTACTGATCTATGTT
AGCGTTCCTGGATCCAAGAAGTCACTCCTTGACCTGCCCTGGTAATTGGCAGCAGATCAGGTCTAAGCA
GCAGAACATCCAGCATGGCCAGCCGAACCAGCTCTGAGATGAGTTGGGTAGATCTGAACATCCCTGATAC
CCCAGAAGCTCCTCCCTGCTATATGGATGTCATTCTGAAGATCACCGATTGGAGAGCCCAACTCCT
CTGCTAGATGACATGGATGGCTCTCAAGACAGCCCTATCTTTATGTATGCCCTGAGTTCAAGTTCATGC
CACCACCGACTTATACTGAGGTGGATCCCTGCATCCTCAACAACAATGTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210804 protein sequence
Red=Cloning site Green=Tags(s)

MVMFKIKSFEVVFNDPEKVVYGSGEKVAGRIVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTSEYL
 RYEDTLLEDQPTGENEMVIMRPGNKYEYKGFELPQGPLGTSFKGKYGCVDYVWKAFLDRPSQPTQETK
 KNFEVDLVDVNTPDLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCGEDEISIHADFENTCSRIVV
 PKAAIVARHTYLANGQTKVLTKLSSVRGNHII SGTCSWRGKSLRVQKIRPSILGCNILRVEYSLLIYV
 SVPGSKVILDPLVIGSRSGLSRTSSMASRTSSEMSWDLNIPDTPEAPPCYMDVIPEDHRLESPTTP
 LDDMDGSQDSPIFMYAPEFKFMPPTTYTEVDPICILNNNVQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6007_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_006472

ORF Size: 1173 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006472.6](#)

RefSeq Size: 2979 bp

RefSeq ORF: 1176 bp

Locus ID: 10628

UniProt ID: [Q9H3M7](#)

Cytogenetics: 1q21.1

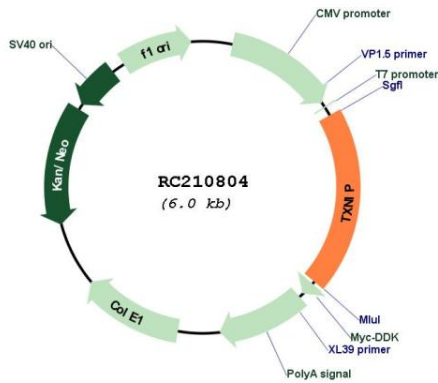
Domains: arrestin

Protein Families: Druggable Genome

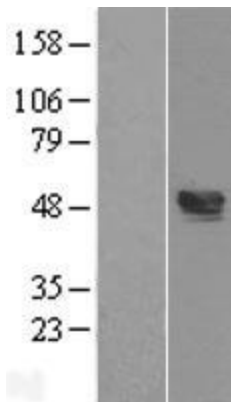
MW: 43.7 kDa

Gene 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]

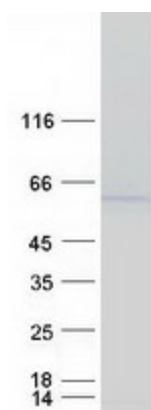
Product images:



Circular map for RC210804



Western blot validation of overexpression lysate (Cat# [LY401945]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210804 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TXNIP protein (Cat# [TP310804]). The protein was produced from HEK293T cells transfected with TXNIP cDNA clone (Cat# RC210804) using MegaTran 2.0 (Cat# [TT210002]).