

Product datasheet for **MG200516**

Tnp2 (NM_013694) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Tnp2 (NM_013694) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Tnp2
Synonyms: Tp-2; TP2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200516 representing NM_013694
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACACCAAGATGCAGAGCCTTCCCACCACTCATCCCCACCCACAGCTCCTCGGGCCTCAAAGTC
 ACACCAGTAACCAGTGAATCAGTGCACCTGCAGCCACCACTGCCGGAGCTGCAGCCAGGCAGGCCACGC
 GGGCTCTAGCTCCAGCCCAGCCCTGGCCGCCCATGAAGCACCCCAAGCCATCCGTGCACTCTCGACAC
 TCACCTGAAGACCCAGCCACCGCGGGAGCTGCCCAAGAACAGGAAGACCTTTGAAGGGAAAGTGAGCA
 AGAGAAAGCCGTCAGGAGGCGAAACGGACTCACAGAGCTAAGAGGCGTAGCTCAGGGCGAAGATACAA
 G

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200516 representing NM_013694
 Red=Cloning site Green=Tags(s)

MDTKMQLPTTHPHSSSRPQSHTSNQCNQCTCSHHCRSCSQAGHAGSSSSPSPGPPMKHPKPSVHSRH
 SPARPSHRGSCPKNRKTfEGKVKRKAARRRRKTRHAKRRSSGRRYK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

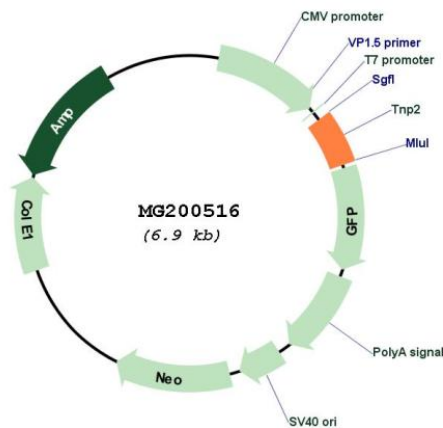


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Cloning Scheme:



Plasmid Map:



ACCN: NM_013694

ORF Size: 351 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:	<ol style="list-style-type: none">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:	<u>NM_013694.4</u> , <u>NP_038722.3</u>
RefSeq Size:	724 bp
RefSeq ORF:	354 bp
Locus ID:	21959
UniProt ID:	<u>P11378</u>
Cytogenetics:	16 5.83 cM
Gene Summary:	Plays a key role in the replacement of histones to protamine in the elongating spermatids of mammals (PubMed:15163613, PubMed:15189834, PubMed:15083521, PubMed:28366643). In condensing spermatids, loaded onto the nucleosomes, where it promotes the recruitment and processing of protamines, which are responsible for histone eviction (PubMed:28366643). The histone H2AFB1-HIST1H2BA/TH2B dimer is required for loading of TNP2 onto chromatin (PubMed:28366643).[UniProtKB/Swiss-Prot Function]