

## Product datasheet for **MG215968**

### Tnn (NM\_177839) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tnn (NM_177839) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tnn
Synonyms:	tenascin-W; TN-W; Tnw
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG215968 representing NM_177839, <b>codon optimized</b> . Due to the complexity of NM_177839, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGACTGTGGGAATGCTCGCATTCCCCTGGGCTTTTTGCTCGCCTCCGTGCTGCTTGTGCGCCAGCG  
CGCCCGCAACACCAGAATCTCCAGGCTGCTCCAACAAGGAGCAGCAGGTCAGTGTGTCCCATACATA  
GATAGATGTGCCTAAATCTGCCCTCGTGCAGGTTGAGACAGATCCTCAGAGTCTCAGTGACGACGGAACA  
AGCCTGCTGGCTCCTGGCGAAGACGGAGAGGAGCAGAACAATCTTCAGACATAACATCAGACTGCAGA  
CCCCACAGAAAACTGCGATCTTGCGGACAGTGTCCAGGATCTGTTGGCCAGGATGAAAAAGCTGGAGGA  
AGAGATGGCTGAGTTGAAGGAGCAATGTAATACCAACAGATGCTGCCAGGGGGCCGGGACTGTCCAGA  
CATTGCTCTGGCCACGGCACCTTTCTGCCTGAAACATGCTCCTGCCATTGCGACCAAGGCTGGGAGGGAG  
CCGATTGCGATCAGCCAACATGCCCGGGGCTTGCAACGGACAGGACGATGCGTCGATGGACAGTGCCT  
GTGCGATGCTCCCTATGTAGGAGTGGACTGCGCTTACGCCGCGTGTCCCCAGGATTGTTACGGGCATGGA  
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CTAAACAGGTGCGGGTTCTAAAGAGCAGCATACATACGATATTACAGGGCTGTTGCCCGGGACCAAGTA  
TATCGTCACACTCGAAACGTAAGAAGGACATCAGCTCAAGTCCCAGCACCTGCTGGCAACAACCGAT  
CTCGCAGTCGTAGCACCGCCTGGGTTAACGAAGAAACAGAACTTCTCTTGACGTGGAATGGGAGAACC



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CACTTACGGAAGTCGACTATTATAAGCTCAGATATGGGCCCTGACAGGCCAGGAAGTGAAGTCAC  
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 AAGTTCATACTTTTGCAGGGATAACGACATCGCACTCTCCAAGTGTGCTCTGACTCACACCGGTGGAT  
 GGTGTTACAAAAATTGCACTTGGCTAATCCAACGAAAGTATGGGAGACTAAACATAGCGAGGGCGT  
 CAACTGGGAACCTTGAAGGGACACGAATTTTCAATCCCGTATGTGGAGCTCAAATCAGGCCCTTCGGG  
 TACAGCCGGGACCGATTCTTGGGCGCAAGAAAAGGTCAATTGGGAAAGCTCGGATGTTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG215968 representing NM\_177839  
 Red=Cloning site Green=Tags(s)

MGLWGMLAFPLGFLLASVLLVASAPATPESPGCSNKEQQVTVSHTYKIDVPKSALVQVETDPQSLSDDGTSLLAPGEDGEEQNIIFRHNIRLQTPQKNCDLADSVQDLLARMKLEEEMAEELKEQCNTNRCCQGAADLSRHCSGHGTFLPETCSCHCDQGWEGADCDQPTCPGACNGHGRCVDGQCVCDAFYVGVDCAYAACPQDCSGHGVCVQGVQCCHEDFTAEDCSEQRCPGDCSNGFCDTGECYCEMFGTGPDCSQVVAPQGLQLLKSTENSLLVSWEPSSEVDYLLSYYPGLKEQATKQVRVPKEQHTYDITGLLPGTKYIVTLRNVKKDISSSPQHLLATDLAVVGTAWVNEETETSLDVEWENPLTEVDYKLRYGPLTGQEVTEVTPKSRDPKSRDYDITGLQPGETEYKITVVPVIRGDLGKPIILLNGRTEIDGPTNVVTNQVTEDTASVSWDPVRADIDKYVVRYIAPDGETKEKAVPKDQSSVTLTGLKPGEAYKVFVWAERGNQGSKKADTKALTEIDSPENLVDRVTENSLSVSWDPVEADIDRYVVSYSVDGETKQVPVKKDQRSTVLTGLSPGVEYKVYVWAEGKDRESKKANTKAPTDIDSPKNLVTDQVTEINTLSVSWDPVQANIDRYMVSYTSADGETREVPVPKEKSSTVLTGLRPGVEYKVHVWAQKGTQESRKANTKAPTDIDGPKNLVTDQVTETTLVSWDPVEADIDRYMVRYTSPDGETKEVPVSKDKSSTVLRGLRPGVEYKVDVWAQKGAQDSRKANTKAPTDIDSPKNLVTEQVTESTATVSWDPVEADIDRYVVRYTSVDGETREFLVGKDQSTVLTGMRPGVEYQVDVWAQKGTQESRKTSTKAPTDIDGPKNLVTDQVTETTLVSWDPVEADIDRYMVRYTSPDGETKEVPVSKDKSSTVLRGLRPGVEYKVDVWAQKGAQDSRKANTKAPTDIDSPKNLAIDQVTETTLVSWDPVQADIDRYVVRYTSADGESKEFLIGKEQRSTVLTGLRPGVEYKVEVWAQKGAQDSRKANTEGHTDIDSPKNLVTNQVTENTATISWDPVQADIDRYMVRYTSADGETREIPVRKEKSSTVLTGLRPGVEYTVQVWAQKGAQDSRKAKTKAPTEIDSPKNLVNRTENTATISWDPVRANIDRYMVRYTSADGETKEIPVSKDQSSITLGLKPGMEYTIHVWAQKGAQDSRKADTKALTEIDPPRNLRFVTHSGGVLTWLPPSAQIDGYILTYQFPNGTVKEVELPRGQQRFEQLDLEQGVYTPVSLVAFKGNQRSRTVSTTLSTVDARFPHPSDCSQVQQNTNAASGLYTIYLNGDASRPMQVYCDMDTDGGGWIVFQRRNTGQLDFKRWRSYVEGFDPMKEFWLGDLKHLNLTGTTTRYEVRLDQTFNESAYAVYDFQVASSKERYKLSVGKYRGTAGDALTYHNGWKFRTTFDRDNIDIALSNCALTHHGGWYKNCNLANPNGKYGETKHSEGVNWEVPWKGHEFSIPYVELKIRPFGYSRDRFSGRKKRSIGKARMF

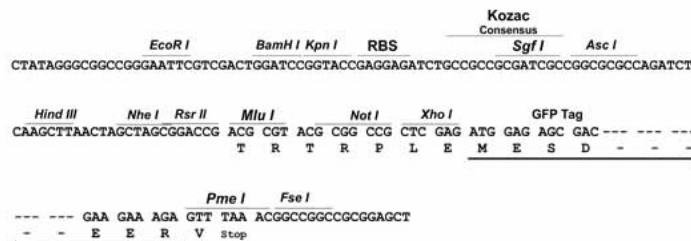
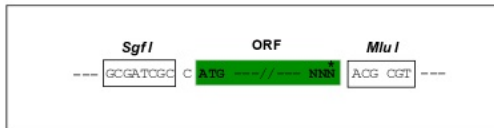
TRTRPLE – GFP Tag – V

**Restriction Sites:**

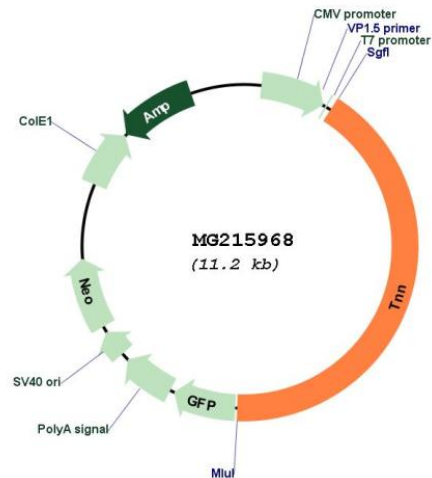
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_177839

ORF Size: 4680 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\\_177839.3](#), [NP\\_808507.2](#)

RefSeq Size: 5825 bp

RefSeq ORF: 4683 bp

Locus ID: 329278

UniProt ID: [Q80Z71](#)

Cytogenetics: 1 H2.1

**Gene Summary:** Extracellular matrix protein that seems to be a ligand for ITGA8:ITGB1, ITGAV:ITGB1 and ITGA4:ITGB1 (By similarity) (PubMed:14709716). Involved in neurite outgrowth and cell migration in hippocampal explants (PubMed:12812753). During endochondral bone formation, inhibits proliferation and differentiation of proteoblasts mediated by canonical WNT signaling (PubMed:17395156). In tumors, stimulates angiogenesis by elongation, migration and sprouting of endothelial cells (By similarity). Expressed in most mammary tumors, may facilitate tumorigenesis by supporting the migratory behavior of breast cancer cells (PubMed:15592496).[UniProtKB/Swiss-Prot Function]