

Product datasheet for **MG227162**

Timp1 (NM_011593) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Timp1 (NM_011593) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Timp1
Synonyms: Clgi; EPA; Timp; TIMP-1; TPA-S1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG227162 representing NM_011593
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATGGCCCCTTTGCATCTCTGGCATCTGGCATCCTCTTGTTGCTATCACTGATAGCTTCCAGTAAGG
 CCTGTAGCTGTGCCCCACCCACCCACAGACAGCCTTCTGCAACTCGGACCTGGTCATAAGGGCTAAATT
 CATGGGTCCCCAGAAATCAACGAGACCACCTTATACCAGCGTTATAAGATCAAGATGACTAAGATGCTA
 AAAGGATCAAGGCTGTGGAAATGCCGCAGATATCCGGTACGCCTACACCCAGTCATGGAAAGCCTCT
 GTGGATATGCCACAAGTCCCAGAACCAGTGAAGAGTTTCTCATCACGGGCCGCTAAGGAACGGAAA
 TTGACATCAGTGCCTGCAGCTTCTTGTTCCCTGGCGTACTCTGAGCCCTGCTCAGCAAAGAGCTTTC
 TCAAAGACCTATAGTGTGGCTGTGGGGTGTGCACAGTGTTCCTGTTTATCTATCCCTTGCAAACCTGG
 AGAGTGACACTACTGTTTGTGGACGGATCAGGTCTCGTGGGCTCTGAGGACTACCAGAGCCGTCACTT
 TGCTTGCTGCCACGGAATCCAGGCTTGTGCACCTGGAGATCCCTTGGGGCCCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG227162 representing NM_011593
 Red=Cloning site Green=Tags(s)

MMAFASLASGILLLLSLIASSKACSCAPHPQTAF CNSDLVIRAKFMGSPEINETTLYQRYKIKMTKML
 KGFKAVGNAADIRYAYTPVMESLCGYAHKSQNRSEEFLLITGR LRNGNLHISACSF LVPWRTLSPAQQRAF
 SKTYSAGCGVCTVFPCL SIPCKLES DTHCLWTDQVLVGS EDYQSRHFACLPRNPGLCTWRSLGAR

TRTRPLE - GFP Tag - V

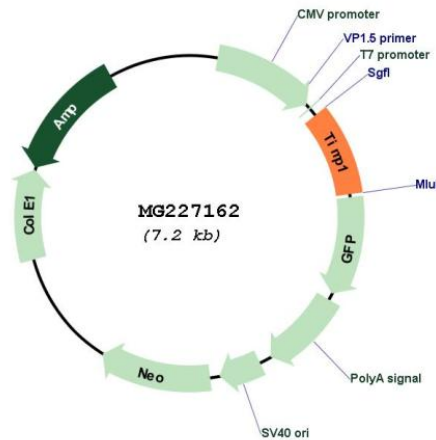
Restriction Sites: Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_011593

ORF Size: 615 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_011593.2](#), [NP_035723.2](#)

RefSeq Size: 902 bp

RefSeq ORF: 618 bp

Locus ID: 21857

UniProt ID: [P12032](#)

Cytogenetics: X 16.38 cM

Gene Summary: Metalloproteinase inhibitor that functions by forming one to one complexes with target metalloproteinases, such as collagenases, and irreversibly inactivates them by binding to their catalytic zinc cofactor. Acts on MMP1, MMP2, MMP3, MMP7, MMP8, MMP9, MMP10, MMP11, MMP12, MMP13 and MMP16. Does not act on MMP14 (By similarity). Also functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signaling cascades via CD63 and ITGB1. Plays a role in integrin signaling. [UniProtKB/Swiss-Prot Function]