

Product datasheet for **MG201879**

Timm22 (NM_019818) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Timm22 (NM_019818) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Timm22
Synonyms: Tim22
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201879 representing NM_019818
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGCTACCGCCCCAAGGCCGGGGTTCAGCTCCTGAGGCAGCGGGTTCGCCGAAGCTCCGTTGC
 AGTACAGCCTTCTTCTCAGTACCTGGTGGCGACAAGCGTCAGCCCCGGCTTCTGGAGCCTGGCAGCCT
 GGGCGGGATCCCGAGTCTGCCAAGAGCGAGGAGCAGAAGATGATCGAGAGGGCAATGAAAGTTGGCC
 TTCAAGGCTGTGCTGGCCTGTGTAGGAGGTTTGTCTGGGAGGCGCTTTGGTATCTTTACTGCTGCCA
 TTGATACCAACGTAGGCTTTGACCCAAAGACCCTTACCGGACACCAACTGCAAAAGAAGTCTGAAAGA
 CATGGGACAGAGAGGAATGTCCTATGCCAAAACCTTTGCCATTGTGGGCGCCATGTTTTCATGACTGAG
 TGCTCTGGTAGAGTCTTACCGGGAAAGTCGGACTGGAAGAACAGCGTCATCAGTGGCTGCATCACTGGCG
 GAGCCATCGGCTTCCGAGCTGGAGTAAAGGCCGGGCCATAGGTTGTGGAGGGTTTCTGCTTTCTCTCG
 TGCAATCGATTATTACCTACGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201879 representing NM_019818
 Red=Cloning site Green=Tags(s)

MAATAPKAGGSAPEAAGSAEAPLQYSLLLQYLVGDKRQPRLLPEGLGGIPSPAKSEEQKMIERAMESCA
 FKAVLACVGGFVLGGAFGIFTAGIDTNVGFDPKDPYRTPAKEVLKDMGQRGMSYAKNFAIVGAMFSCTE
 CLVESYRKGSDWKNSVISGCITGGAIGFRAGVKAGAIGCGGFAAFSAIDYYLR

TRTRPLE - GFP Tag - V

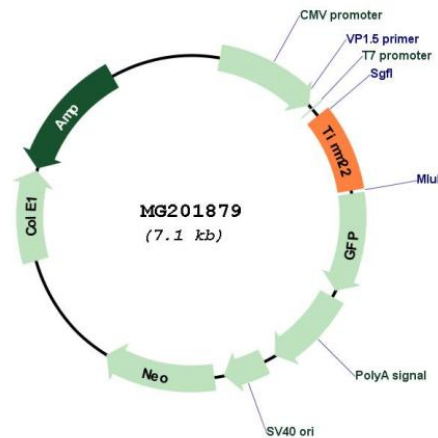
Restriction Sites: Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_019818

ORF Size: 582 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_019818.5](#)

RefSeq Size: 2771 bp

RefSeq ORF: 585 bp

Locus ID: 56322

UniProt ID: [Q9CQ85](#)

Cytogenetics: 11 B5

Gene Summary: Essential core component of the TIM22 complex, a complex that mediates the import and insertion of multi-pass transmembrane proteins into the mitochondrial inner membrane. In the TIM22 complex, it constitutes the voltage-activated and signal-gated channel. Forms a twin-pore translocase that uses the membrane potential as external driving force in 2 voltage-dependent steps (By similarity).[UniProtKB/Swiss-Prot Function]