

Product datasheet for **MG202174**

Mis12 (NM_025993) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mis12 (NM_025993) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Mis12
Synonyms: 2510025F08Rik; AU044651; Misc12
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG202174 representing NM_025993
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGTGGATCCGATGGCCTATGAGGCCAGTTCTTTGGCTTCACACCACAGACTTGCCTGCTGAGGA
 TCTACGTAGCATTTCAAGACCACCTGTTTGAAGTGATGCAGGCTGTTGAACAGGTTATCCTAAAGAAGCT
 GGAGGACATTCAAACTGTGAGATCACCCCTGTCCAGACTCGGAAATGCACAGAGAAGTTTCTTTGCTTC
 ATGAAAGGACGCTTCGATAACCTTTTTGGCAAAATGGAGCAGCTGATTTTGCAGTCGATTTGTGTATTC
 CTCAAACATCCTGCTTCTGAAGACAAGTGTCAGGAGACGAATCCTTTCAGTGAAGAGAACTCGAGCT
 TCTCCAACAGGAAATCAAGAGTTACAGGAGAAATACAAGTTGAGTTGTGCACTGAGCAGGCCCTTCTT
 GCAGAATTAGAGGAGCAGAAAAGTGAAGGCCAACTCAGAGAGACCTTGACTTCTTTGATGAGCTTG
 AAAACATCGGCAGATATCAAGGAAGTAACTTTAGGGAGAGTTTGGCATCCCTGGTCCAGAGCTGCAG
 AAAACTTCAGAGCATTAGAGACAATGTAGAAAAAGAAAGCAGGAGACTGGAAACACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG202174 representing NM_025993
 Red=Cloning site Green=Tags(s)

MSVDPMAYEAQFFGFTPQTCLLRIYVAFQDHLFEVMQAVEQVILKKLEDIPNCEITPVQTRKCTEKFLCF
 MKGRFDNLFGKMEQLILQSILCIPPNIILLPEDKCQETNPFSEEKLELLQQEIKELQEKYKVELCTEQALL
 AELEEQKTVKAKLRETLFFDELENIGRYQGTSNFRESLASLVQSCRKLSIRDNVEKESRRLETQ

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

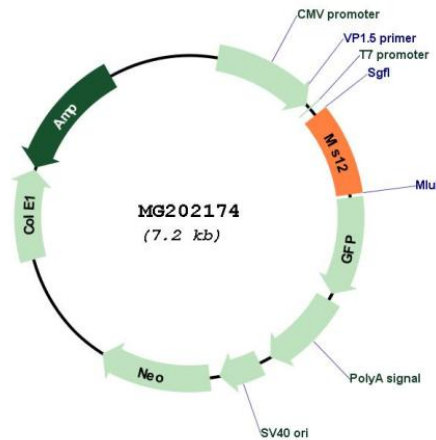


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Cloning Scheme:



Plasmid Map:



ACCN: NM_025993

ORF Size: 618 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_025993.3](#)

RefSeq Size: 2766 bp

RefSeq ORF: 621 bp

Locus ID: 67139

UniProt ID: [Q9CY25](#)

Cytogenetics: 11 B4

Gene Summary: Part of the MIS12 complex which is required for normal chromosome alignment and segregation and for kinetochore formation during mitosis. Essential for proper kinetochore microtubule attachments.[UniProtKB/Swiss-Prot Function]