

## Product datasheet for **RG226523**

### Mortality Factor 4 like 2 (MORF4L2) (NM\_001142418) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mortality Factor 4 like 2 (MORF4L2) (NM_001142418) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MORF4L2
Synonyms:	MORFL2; MRGX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226523 representing NM_001142418 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGTCCAGAAAGCAGGGTTCTCAACCTCGTGGACAGCAATCTGCAGAAGAAGAGAAGCTTCAAAAAAC  
CAACTAGAAGCAACATGCAGAGAAGTAAAATGAGAGGGGCTCCTCAGGAAAGAAGACAGCTGGTCCACA  
GCAGAAAAATCTGAACAGCTCTCCAGGAAGATGGGGTGGTCGCTCTGCAGAGAACCCCTTCAGGA  
TCCGTGAGGAAGACCAGAAAGAACAAGCAGAAGACTCCTGGAAACGGAGATGGTGGCAGTACCAGCGAAG  
CACCTCAGCCCCCTCGGAAGAAAAGGGCCCGGCAGACCCCACTGTTGAAAGTGAGGAGGCTTTAAGAA  
TAGAATGGAGTTAAAGTGAAGATTCCTGAAGAATTTAAACCATGGCTTGTGAGGACTGGGACTTAGTT  
ACCAGGCAGAAGCAGCTGTTTCACTCCCTGCCAAGAAAAATGTAGATGCAATCTGGAGGAGTATGCAA  
ATTGCAAGAAATCGCAGGGAAATGTTGATAATAAGGAATATGCGGTTAATGAAGTTGGCAGGAATAAA  
AGAATATTTCAATGTGATGTTGGCACTCAGCTGCTCTACAAATTTGAGAGGCCCCAGTATGCTGAAATC  
CTTTGGCTCACCTGATGCTCCAATGTCCAGGTTTATGGAGCACCACCTACTGAGATTATTTGTAA  
GAATTGGAGCAATGTTGGCCTATACGCCCTTGATGAGAAAAGCCTTGCAATTATGTTGGCTATTTGCA  
TGATTTCTAAAATATCTGGCAAAGAATTCTGCATCTCTTTACTGCCAGTGATTACAAAGTGGCTTCT  
GCTGAGTACCACCGCAAAGCCCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG226523 representing NM\_001142418  
 Red=Cloning site Green=Tags(s)

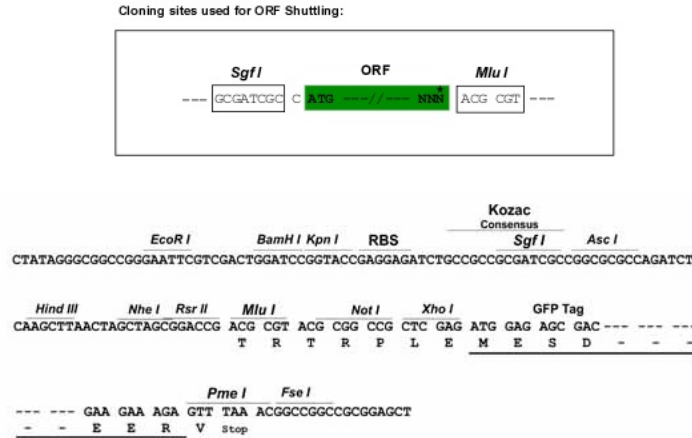
MSSRKQGSQPRGQQAEEENFKKPTRSNMQRSKMRGASSGKKTAGPQQKNLEPALPGRWGGRSAENPPSG  
 SVRKTRKNKQKTPGNDDGGSTSEAPQPPRKKRARADPTVESEAFKNRMEVKVKIPEELKPWLVEDWDLV  
 TRQKQLFQLPAKKNVDAILEEYANCKKSSQGNVDNKEYAVNEVVAGIKEYFNVMLGTQLLYKFERPQYAEI  
 LLAHPDAPMSQVYGAPHLRLRFVRIGAMLAYTPLDEKSLALLLGYLHDFLKYLAKNASLFTASDYKVAS  
 AEYHRKAL

TRTRPLE - GFP Tag - V

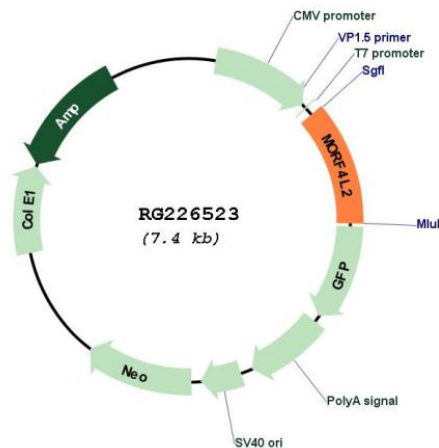
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001142418

**ORF Size:** 864 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001142418.1](#), [NP\\_001135890.1](#)

**RefSeq Size:** 2047 bp

**RefSeq ORF:** 867 bp

**Locus ID:** 9643

**UniProt ID:** [B3KP92](#)

**Cytogenetics:** Xq22.2

**Protein Families:** Transcription Factors

**Gene Summary:**

Component of the NuA4 histone acetyltransferase complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histone H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage. Also component of the MSIN3A complex which acts to repress transcription by deacetylation of nucleosomal histones. [UniProtKB/Swiss-Prot Function]