

Product datasheet for **RG212995**

MMS22L (C6ORF167) (MMS22L) (NM_198468) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMS22L (C6ORF167) (MMS22L) (NM_198468) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MMS22L
Synonyms:	C6orf167; dj39B17.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212995 representing NM_198468 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAAGTGTCTGCTGCATCGACGTTCTGACTGACAGCTTAGAGCTGGAGCTGGGGACGGAATGGT
GCAAACCTCCTTACTTTTCTGTGCTGTTGACAACAGAGGAGGAGGAAAACATTTTTCTGGAGAATCCTA
CCTCTGCAGCGGAGCCCTAAGCGATTGATTTGAATCTTGACCCTTTACCAACTAATTTGAAGAAGAT
ACCTTGAAAATATTTGGCATTCACTGGGTTACTGAAACAGCATTAGTGAATTCATCTAGAGAAGTCTTTT
ATTTATTCAGGCAACAAGTGTACAAGTGGAAACCTTGTACAGTCCAGTTGTGATTTTGGGAAGGTATC
AACTCTACACTGCAAAGCAGACAATATTAGGCAGCAGTGTGACTATTTCTCCATTATGTTAAAGTTTTT
ATCTTCAGGTATCTGAAAGTACAGAATGCTGAGAGTCATGTTCCCTGTCCATCCTTATGAGGCTTTGGAGG
CTCAGCTTCCCTCAGTGTGATTGATGAGCTTCATGGATTACTCTGTATATTGGACACCTATCTGAACT
TCCCAGTGTTAATATAGGAGCATTGTAAATCAAACCAGATTAAGCTTTTTCCACCGTCATGGCATTTA
TTACATCTCCACTGGATATACATTGGCTGGTGTAGAAATCTTTACATGCTGGGTGAAAAATTGAAAC
AAGTTGTATATGGTCATCAGTTTATGAATCTGGCAAGTGACAATTAACCAACATCAGCCTATTTGAAGA
ACATTGTGAAACTCTCCTTTGTGATTTAATAAGCCTGTCACTCAACAGGTACGACAAGGTTAGGTCTTCT
GAATCATTAAATGAGTGACCAGTGTCCATGTTTACGCATTAAGAATTATGGGTTCTACTTATTCATCTTC
TAGACCACAGAAGTAAATGGTTTTGTCTCGGAATCATTGGAAGTGGTTGAATAAACTACTTAAACACT
GCTTGAAAAATCAAGTGACCGAAGAAGATCCTCTATGCCTGTAATCCAGTCCAGGATCCATTAGGTTTT
AGTTGGTGGATTACTCATGTAGCATCATTTTACAAGTTTGTATCGCCATGGAGTACCAGATGAAATGA
GAAAAGTGGAAATCAAATGGAACCTTGTAGAAGAACTGCTGAAAAAGTCCATCAGTGTTCAGGGTGCAT
TCTAGAAGAACAATTACGAATGTATCTTCACTGTTGTTTGACACTTTGTGATTTCTGGGAGCCAAACATT
GCAATTGTTACCATTTTATGGGAATATTATAGTAAGAACCTGAATAGTTCCTTCAGTATTTCTTGGCTTC
CTTTTAAAGCCTTGCTAATACCATGAAGTCACCCTTGCTATGCTTGAATGGTGAAGACTTGCTGTTG
CGATAAACAAGATCAGGAACATATAAATCCAGCAGTAGTTATACTATTTTTCTTTGTATTCTGGCAAAA



[View online »](#)

GTTGTTAAAAAGCAATGAAGAGCAATGGCCCTCATCCTTGAAAACAAGTCAAAGGAAGAATATATTTCAA
AATTCCATCAAAAAAGAAATGGAAGAAGTAACTGAAGTTGGTCTACAGAAGCTTTTTAGCCTTTTTCTACT
GTTAGCAGCTGTTGCAGAGGTAGAAGATGTTGCAAGTCATGTTTTAGACCTCCTGAATTTCTCAAGCCT
GCTTTTCGTAATGTCTCAGAGAGCCCTCATTGGAAAGGTCACATGGCCTTCTCTTGATGTATGCCAGA
AAAATCTGGACATTGGTGTGGCTGAGAAATTTTCATGTGCTTCCGGGAGAAAGCAAAGGAATCCT
GGTGTCTAAGAATGAGGAAATGGTACAGAGACAGACTATCTGGACCCTTCTTTCCATATACATTGATGGT
GTCAAGAAGTGTGGAGACCAGCTATTGCTTGTATCCTTCCCATGAAAAACTGCTTAATGATGGATTTA
GTATGCTTCTGCGAGCATGTGCGAATCTGAACCTTAGGACAGTATTGAGCTTCTACAAGCTGTTCTGGC
CAGAATCAGGAGTATGCATCAACAATTGTGTCAGGAACCTCAAAGGGACAATGTGGACCTATTTGTACAG
TCTTCATTATCGGCTAAAGAGCGCCACCTTGCTGCAGTTGCCAGTGCAGTGTGGAGACATTTCTTTTCAT
TTTTGAAGAGTCAGAGAAATGTCACAGGTAGTGCCTTTCTCACAACCTTGGGATGCAGCTGCAGACTTTAC
TTTGCTAGCAATGGACATGCCAAGCACAGCTCCATCAGATTTTCAGCCTCAGCCAGTTATATCAATTATT
CAACTTTTTGGTGGGATGATATCATCTGCCCTCAAGTTGTAGCAAGATATTTAAGTCATGCTCTACAAA
ATAGCACATTATGTGAAGCACTTCTCATTGAGGCTATGTATCTTTCAAGCCTTAACCGTAAGATCATG
GATTCGTTGTGTTTTGCAAAATGTATATTAACCACTCTCTGGCCTGATGATTTGCTCATAGATAAAAAAT
CTGGAAGAGGCAGTTGAAAAAGAGTACATGAAACAGTTGGTCAAACCTGACAAGATTACTATTTAATCTCT
CAGAAGTAAAGAGTATTTTCTCAAAGGCCCAAGCTGAATATTTATCCATCTCAGAAGACCCTAAAAAAGC
ACTTGTTCGATTCTTTGAGGCTGTTGGTGAACCTACGGGAACGTCCAGACACTTTCTGATAAAATCTGCC
ATGGTCACAAAAGTCTTGGAAATACCTTGGTGAAGTATTAATAATTAAGCCTTATTTGGGAAAAAAG
TTTTCAGTGCAGGGCTGCAGCTGACTTATGGAATGATGGGAATCCTTGTGAAATCATGGGCACAAATCTT
TGCCACTTCTAAAGCCAAAAATTAATCTCCGATCATAGATTGTTTACTGCTGCCACATGCAGTATTA
CAGCAAGAGAAGGAACTGCCTGCACCTATGTTGTCAGCAATTCAGAAAAGTCTTCTTTGTATCTCCAGG
GCATGTGTATCGTGTGTTCAATCTCAAATCCGAATGCCTATTTGAATCAATTGCTAGGGAATGTTAT
TGAGCAGTATATTGGGCGATTTCTCCAGCTTACCATATGTTTCAGATCTTGGACAACATCCTGTTTTG
CTGGCATTGAGAAACACAGCCACTATTCGCAATATCATCTCTAAAGAAATGCATTGTGCAAGTCATAA
GGAAATCTACCTTGAGTATAAGGGTCTCACCTCCTCCTCGCTTAGCATCCATTCTGGCCTTCATCCT
CCAACCTTCAAGGAACTAACACAGACATTTATGAAGTTGAACTACTCCTCCCTGGCATTTTAAAATGC
TTGGTGTAGTCAGTGAACCACAAGTAAAAGGCTGGCCACAGAGAACCTGCAATACATGGTAAAAGCCT
GCCAAGTGGGTCAGAAGAAGAACCTTCTCCAGCTGACTTCTGTGTTAGGCAGTTTATCCAGGATTA
TGATGAGGTACTATTACCAGGTTTACAGCATTTTAGAACAGTAGCAACATTGGACCAGCAGGTTGTC
ATCCACTTGATTTCTACCCTTACTCAGTCTCTGAAGATTGAGCAGAAATGGGCTTGGCAGGAATA
TAGCACAAGGGAAGCCTATAGCAAACCTTTGTCTCACCTGGACAGATGGGACAAGATGAGATGCAGAG
ACTGGAATGATAAATACT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG212995 representing NM_198468
 Red=Cloning site Green=Tags(s)

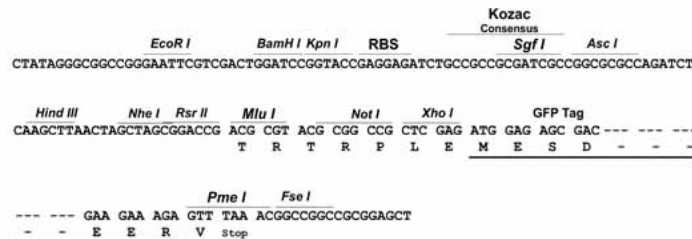
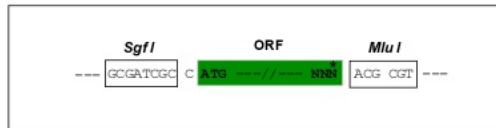
MENCSAASTFLTDSLELELGTEWCKPPYFSCAVDNRRGGGKHFSGESYLCSGALKRILNLDPPTNFEE
 TLEIFGIQVWTETALVNSSREL FHLFRQQLYNLETLQSSCDFGKVSTLHCKADNIRQQCVLFLHYVKVF
 IFRYLKVQNAESHVPVHPYEALAEALPQSVLIDELHGLLLYIGHLSELPVNI GAFVNQNQIKLFPSPWHL
 LHLHLDIHWLVLEILYMLGEKLVVYGHQFMNLASDNL TNISL FEEHCETLLCDLISL NRYDKVRSS
 ESLMSDQCPCLRIKELWVLLIHLLDHRSKWFVSESFWNWLNKLLKTLLEKSSDRRRSSMPVIQSRDPLGF
 SWWIITHVASFYKFRHGVPEMRKVESNWNFVEELLKKSISVQGVILEEQLRMYLHCCLTLCDFWEPNI
 AIVTILWEYYSKNLSSFSISWLPFKGLANTMKSPLSMLMVKTCCKDKQDQELYKSSSYTIFLCILAK
 VVKAMKSNPHPWKQVKGRIYSKFHQKMEELTEVGLQNFSLFLLAAVAEVEDVASHVLDLLNFKP
 AFVMSQRALIWKGHMAFLMYAQKNLDIGVLA EKFSCAFREKAKEFLVSKNEEMVQRQTIWTLLSIYIDG
 VQEVFETSYCLYPSHEKLLNDGFSMLLRACRESELRTVLSFLQAVLARIRSMHQQLCQELQRDNVDFVQ
 SSLSAKERHLAAVASALWRHFFSFLKSQRMSQVVPFSQLADAAAADFTLLAMDMPSTAPSDFPQPVISII
 QLFGWDDIICPVVARYLSHVLQNSTLCEALSHSGYVSFQALTVRSWIRCVLQMYIKNLSGPDDLIDKN
 LEEAVEKEYMKQLVKLTRLLFNLSEVKSIFSKAQAEYLSISEDPKKALVRFVEAVGVTYGNVQTLSDKSA
 MYTKSLEYLGEVLKYIKPYLGGKVF SAGLQLTYGMMGILVKSQAQIFATSKAQKLLFRIIDCLLPHAVL
 QQEKELPAPMLSAIQKSLPLYLQGMCI VCCSQSNPNA YLNQLLGNVIEQYIGRFLPASPYVSDLGQHPVL
 LALRNTATIPPISSLKKCIVQVIRKSYLEYKGSPPPRLASILAFILQLFKETNTDIYEVLLPGILKC
 LVLVSEPPQVKRLATENLQYMKACQVGSSEEPSSQLTSVFRQFIQDYGMRYYYQVYSILETVATLDQQVV
 IHLISTLTQSLKDSEQKWGLGRNIAQREAYSKLLSHLQGMQDEMQRLENDNT

TRTRPLE - GFP Tag - V

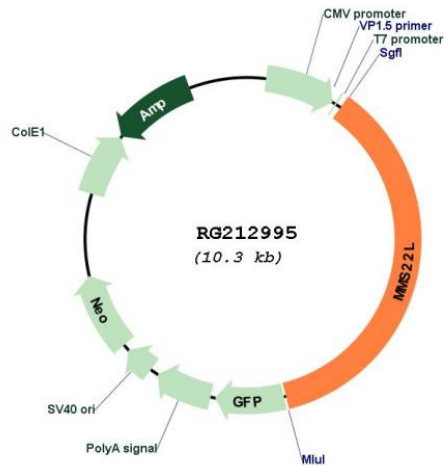
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_198468

ORF Size: 3729 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 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_198468.1](#), [NP_940870.1](#)

RefSeq Size: 4269 bp

RefSeq ORF: 3732 bp

Locus ID: 253714

UniProt ID: [Q6ZRQ5](#)

Cytogenetics: 6q16.1

Gene Summary: The protein encoded by this gene forms a complex with tonsoku-like, DNA repair protein (TONSL), and this complex recognizes and repairs DNA double-strand breaks at sites of stalled or collapsed replication forks. The encoded protein also can bind with the histone-associated protein NFKBIL2 to help regulate the chromatin state at stalled replication forks. Finally, this gene appears to be overexpressed in most lung and esophageal cancers. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2017]