

Product datasheet for **MR230997**

Mtif2 (NM_001282118) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mtif2 (NM_001282118) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mtif2
Synonyms:	2310038D14Rik; 2410112O06Rik; IF-2(Mt); IF-2mt; IF2(mt)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR230997 representing NM_001282118
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAACCAGAAGCTACTGAAGTTGGAAAACCTGCTACGATTTCACTATTTGTAGGCAGGTGCACAGCC
 CAAGTCAAAGAAGACTCTTAGCATGGTGTAGACATGGGTTTGCACCGCTTCCTCAGTGTGGAGAGATCT
 GCTGGGTGCCCGTCTGGCAGACAGACATGCTCATTGGTTTCAGCTTTGCATCAGCACAGACTTCTTGTA
 ACAAAGAAGGAAAAAGACCACCAAGATCTCAGTTGTCTCCAGTAAAACTAAAAAGAGGTAGAAGTAT
 GGGTTGGAATGACTGTTGAAGATCTAGCCAGTCCATGGCAAAGATATAGATTGTGTATACGAAGCTTT
 ATTGAACACTGCCATTGACGTAGATTTCATTAGAAGCAAACCTCACATTTAGATGAAGTCTGGATCAAAGAA
 GTTATAAAGAAGGCAGGAATGAAGCTGAAATGGAGCAAATTAACAGGAAAGAATTAGAGAAAAAAG
 ATGCTGTGAGAAGCCTGGGACAGATCCAGCTTTATTAACCAAGGTCCCCAGTTGTTACTGTAATGGG
 CCATGTTGATCATGGGAAAACGACCTTACTTGACAACTTCGAGAACTCAAGTTCAGCGATGGAAGTC
 GGAGGCATCACTCAACACATTGGTGCTTTTCTGTCTCTCTGCCTTCTGGAGAAAAGATAACTTTTCTTG
 ATACTCTGGACATGCTGCCTTCTCAGCAATGAGAGCCAGAGGAGCTCAGGTCACCGACATTGTTGTGTT
 GGTTGTAGCTGCAGATGATGGGGTAATGAAACAACTGTGGAATCCATTCAGCATGCAAAAGATGCAGAA
 GTTCTATTATCCTTGAATCAATAAGTGCACAAAGACAGATGCTGATCCTGAAAAGGTGAAAAAGAGC
 TCCTAGCTTACGATGGTGTGTGAAGAGTATGGTGGTGTGTTCAAGCAGTGCACGTCTCTGCACCTTAC
 GGGCGATAACCTGATGGCTTTGGCAGAAGCACAATTGCTCTCGCAGAAATCTTGGAACTGAAAGCAGAT
 CCCACCGTCCAGTGAAGGAACAGTAAATAGAGTCTTTACAGACAAAGGAAGAGGTCTGTTACAACAG
 CTATAATTCAAAGAGGAACTCTGAGAAAAGGCTCAATTTAGTTGCTGGGAAAGGTTGGGCAAAAGTTCCG
 ACTAATATTTGATGAAAATGAAAAAATACTTAATGAGGCCATCCAGCATGCCAGTGGGAATCATAGGC
 TGGAGAGACCTTCTTCTGCAGGAGATGAAATCTTGAAGTAGAATCTGAGCCAAGGGCCCGTGAAGTTA
 TTGAATGGAGGAAGTCTGAGCAAAAAGAAGAAAAGGCAAGATGACCTGAAAATAATGGAAGAAAAGCG
 AAGGGAACACCAAGAAGCGCATCGGAAAGCCCGTGAAGATGAGCAGTCTGCACTGGAAGAGAGATCA
 TATATAAAGTTCCTTGAAGGAAACAACAGAGACCCTTAAAGCCAAAGAAAAGGTAGAAAAGGCAATCAA
 ATGTACTTCTATAATTATTAAGGTGACGTTGATGGGTCTGTGGAGGCCATCTGAACCTTCTGGATAC
 CTACGATGCTCCACGAATGTGAACCTCGAATTAGTACATTTGGATTGGGTGACATCAGTGAAGATGAT
 GTTACCTTTGCTGAGACATTTGATGGTGTATTTATGGTTTTAATGTGGAGGCAGGCAGTCTATTCAGC
 AGTCAGCTGCACAAAAGGAGTTAAGATTAACCTTCACAAAATCATCTACCATCTTATTGAAGATTTGCA
 GGAGGAACCTAAGCAGCAGATTGCCCCACACACTGGAGGAGTACCAATAGGTGAGGCTTCTATACTAGCT
 ACCTTCACTGTAACAGAAGGGAAGAAAAAATCCTGTTGCTGGCTGCAGAGTTCAAAGGGACAATTAG
 AAAGACATAAGAAGTTTAAATTAATCCGAAACGGCCAAGTTATTTGGAAGGGATCATTAACTCTCTGAA
 ACACCATAAAGATGACATTTTCAGTTATAAAAACCTGGTATGGACTGTGGTCTTAGTTTAGATGAAGAAAA
 GTCGAATTCAAACCGGAGATCAAGTCATTTGTTATGAAGAAAAAAGTTCCAACCTAAGACTTCTGGG
 ATCCAGGATTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230997 representing NM_001282118
 Red=Cloning site Green=Tags(s)

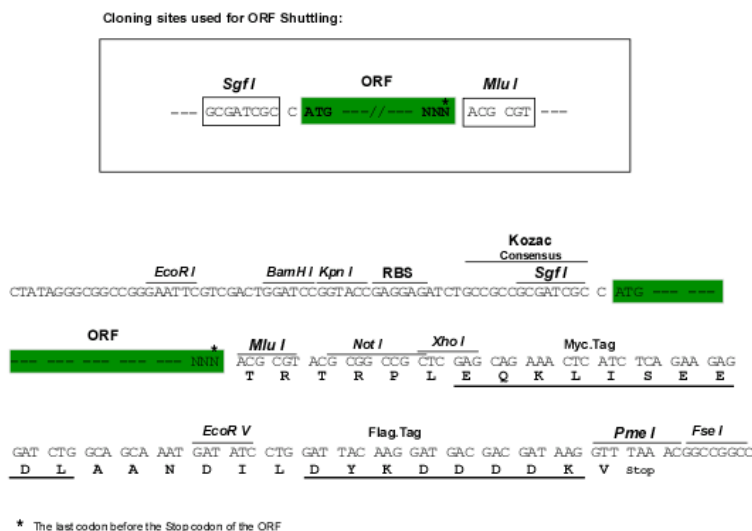
MNQKLLKLENLLRFHTICRQVHSPSQRRLLAWCRHGFAPASSVWRDLLGARSWQTDMLIGSALHQHRLLV
 TKKEKRPPRSQQLSPVKTKKEVEVWVGMTVEDLASAMAKDIDCVYEALLNTAIDVDSLEANSHLDEVWIKE
 VIKKAGMKLKWSKLKQERIRENKDAVRRPGTDPALLKPRSPVVTVMGHVDHGKTTLLDKLRETQVAAMEV
 GGITQHIGAFVLVSLPSGEKITFLDTPGHAAF SAMRARGAQVTDIVVLVVAADDGVMKQTVESIQAHDAAE
 VPIILAINKCDKTDADPEKVKKELLAYDVVCEEYGGDVQAVHVSALTGDNLMALAEATIALAEILELKAD
 PTGPVEGTVIESFTDKGRPVTTAIIQRGTLRKGSI L VAGKSWAKVRLIFDENGKILNEAYSPMPVGIIG
 WRDLP SAGDEILEVESEPRAREVIEWRKSEQKEEKGKDDLKIMEEKREHQEAHRKAREKYGSLHWKERS
 YIKFLERKQQRPLKPKKEKVERQSNVLP I I I K G D V D G S V E A I L N L L D T Y D A S H E C E L E L V H F G L G D I S E N D
 V T F A E T F D G V I Y G F N V E A G S A I Q Q S A A Q K G V K I K L H K I I Y H L I E D L Q E E L S S R L P H T L E E Y P I G E A S I L A
 T F T V T E G K K K I P V A G C R V Q K G Q L E R H K K F K L I R N G Q V I W K G S L T S L K H H K D D I S V I K T G M D C G L S L D E E K
 V E F K P G D Q V I C Y E E N K V P T K T S W D P G F

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001282118

ORF Size: 2181 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001282118.1](#), [NP_001269047.1](#)

RefSeq Size: 2739 bp

RefSeq ORF: 2184 bp

Locus ID: 76784

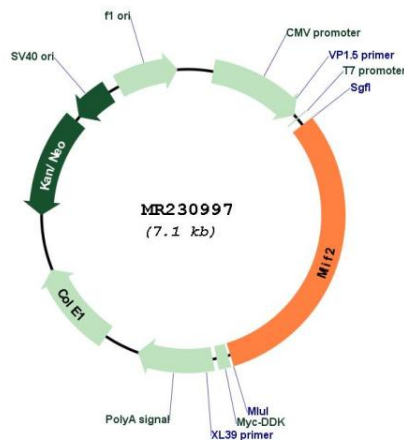
UniProt ID: [Q91YJ5](#)

Cytogenetics: 11 A3.3

MW: 81.3 kDa

Gene Summary: One of the essential components for the initiation of protein synthesis. Protects formylmethionyl-tRNA from spontaneous hydrolysis and promotes its binding to the 30S ribosomal subunits. Also involved in the hydrolysis of GTP during the formation of the 70S ribosomal complex (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230997