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Product datasheet for RC213244

GFM2 (NM_170691) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GFM2 (NM_170691) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GFM2
Synonyms:	EF-G2mt; EFG2; hEFG2; mEF-G 2; MRRF2; MST027; MSTP027; RRF; RRF2; RRF2mt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC213244 representing NM_170691
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGACCAACTTGAGGATATTTGCAATGAGTCATCAGACAATACCCAGTGTGTATATTAATAATATAT
GCTGCTATAAAATAAGAGCAAGTTTAAAAAGATTAAAGCCACATGTGCCGCTTGGAAGAAATTGCAGTTC
TCTACCAGGCTTAATAGGAAATGATATCAAATCCCTTCATTCCATCATCAATCCTCCCATAGCTAAAATC
CGTAATATTGGAATTATGGCTCATATTGATGCAGGCAAAACTACCACCACAGAAAGAATATTGTACTATT
CCGGATATACAAGATCACTGGGAGATGTTGATGATGGAGACACAGTGACAGATTTCATGGCCCAAGAGCG
AGAAAGAGGCATTACTATTCAATCAGCTGCTGTTACATTTGATTGGAAAGGTTATAGAGTCAATCTAATT
GATACACCAGGTCATGTGGACTTTACCTTGGAGGTTGAGCGGTGCCTAAGAGTGTTGGATGGTGCAGTGG
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TATACCTCGAATCTGTTTTTTAAACAAGATGGACAAAACTGGAGCAAGCTTTAAGTATGCAGTTGAAAGC
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GAGTGGTGGATGTAGTAATGAAAGAAAAACTTCTTTGGAATTGCAATTCAAATGATGGAAAAGACTTTGA
GAGAAAGCCCCTCTTGGAAATGAATGATCCTGAATTGCTGAAGGAAACAACTGAAGCAAGGAATGCCTTA
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TTACATATAGAGATTATTCATGATCGAATCAAGAGGGAATATGGACTGGAGACCTATCTCGGGCCTCTCC
AGGTGGCATATCGAGAGACCATCCTAAACTCAGTTCGTGCCACAGATACCTTAGATAGAACTTTAGGAGA
CAAAAGGCATCTTGTGACTGTAGAAGTGGAAGCAAGGCCAATTGAAACATCATCTGTTATGCCTGTGATT
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CTGAAGAAAGCTGATAAGCAAGTTTTGGAGCCTCTGATGAATCTTGAGGTTACAGTAGCTAGAGATTATC
TCAGCCCTGTCCTGGCAGATCTGGCACAAAGAAGAGGAAACATTCAGGAAATTCAGACTCGCCAGGACAA
CAAAGTTGTTATTGGATTTGTTCCCTTAGCAGAAATTATGGGTTATTCAACTGTGCTTCGAACGCTAACA
TCAGGCTCAGCTACTTTTGCCTTAGAACTATCTACTTATCAAGCCATGAATCCTCAAGATCAAAATACAC
TGCTCAACCGGAGAAGTGGTTTGACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

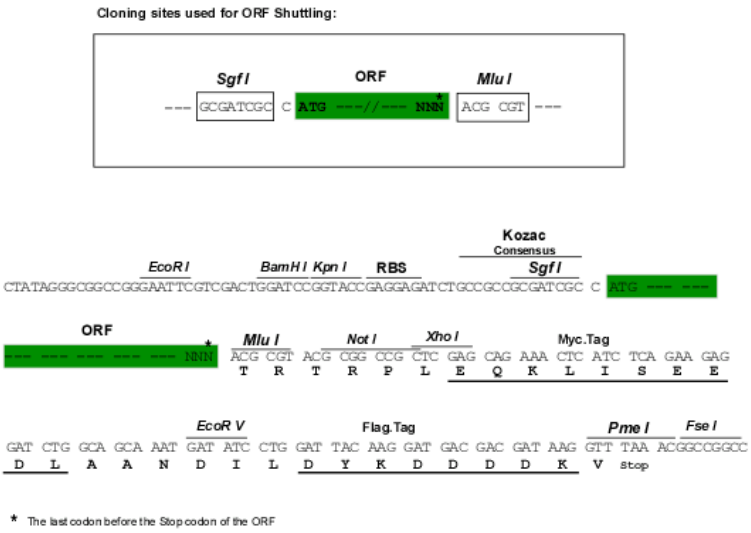
>RC213244 representing NM_170691
Red=Cloning site Green=Tags(s)

MLTNLRIFAMSHQTIPSVYINNICCYKIRASLKRLKPHVPLGRNCSSLPGLIGNDIKSLHSIINPPIAKI
RNIGIMAHIDAGKTTTTERILYYSGYTRSLGDVDDGDTVTDFMAQERERGITIQSAAVTFDWKGYRVNLI
DTPGHVDFTLEVERCLRVLDGAVAVFDASAGVEAQTLTVWRQADKHNIPRICFLNKMDKTGASFKYAVES
IREKLKAKPLLLQLPIGEAKTFKGVVDVVMKEKLLWNCNSNDGKDFERKPLLEMNDPELLKETTEARNAL
IEQVADLDDEFADLVLEEFSENFDLLPAEKLQTAIHRVTLAQTAVPVLCGSALKNKGIQPLLDAVTMYLP
SPEERNYEFLERISRLLLPFADQHVEIPSLTAGNIALTVGLKHTATGDTIVSSKSSALAAARRAEREGEK
KHRQNNEAERLLLAGVEIPEPVFFCTIEPPSLSKQPDLEHALKCLQREDPSLKVRLDPDSGQTVLCGMGE
LHIEIIHDRIKREYGLETYLGPLQVAYRETILNSVRATDTLDRTLGDKRHLVTVEVEARPIETSSVMPVI
EFEYAESINEGLLKVSQEAIENGIHSACLQGPLLGSPIQDVAITLHSLTIHPGTSTTMISACVSRCVQKA
LKKADKQVLEPLMNLEVTVARDYLSPVLADLAQRRGNIQEIQTRQDNKVVIGFVPLAEIMGYSTVLRTLT
SGSATFALELSTYQAMNPQDQNTLLNRRSGLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_170691

ORF Size: 2196 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_170691.3

RefSeq Size: 2970 bp

RefSeq ORF: 2199 bp

Locus ID: 84340

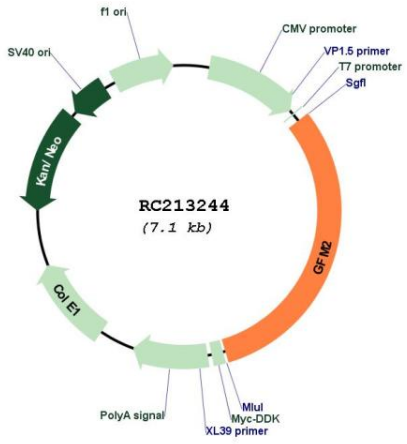
UniProt ID: Q969S9

Cytogenetics: 5q13.3

MW: 81 kDa

Gene Summary: Eukaryotes contain two protein translational systems, one in the cytoplasm and one in the mitochondria. Mitochondrial translation is crucial for maintaining mitochondrial function and mutations in this system lead to a breakdown in the respiratory chain-oxidative phosphorylation system and to impaired maintenance of mitochondrial DNA. This gene encodes one of the mitochondrial translation elongation factors, which is a GTPase that plays a role at the termination of mitochondrial translation by mediating the disassembly of ribosomes from messenger RNA . Its role in the regulation of normal mitochondrial function and in disease states attributed to mitochondrial dysfunction is not known. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC213244