

## Product datasheet for **MR218049**

### **Gfm2 (NM\_001146043) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gfm2 (NM_001146043) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gfm2
Synonyms:	6530419G12Rik; A930009M04Rik; EF-G2mt; EFG2; MST027; RRF2mt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR218049 representing NM\_001146043  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTACCAAAATGGAGGATTTTGCAGTGAATCATCAGAGAACGTTTCAGTGTGCACCTTAATACCATGT  
 GTTACTGCAAAATAAAAGCAAATTTAAAAAGATTAAGAGCTCAGCTGCCTCTTACAAGAACTACAGTTC  
 TGCACCAGGCATAGCAGGAAGTGTGCAAGTCTCTTATTCCGTCATTAAACCTCCTGTGGCCAAAATT  
 CGTAATATTGGAATTATGGCACATATTGATGCAGGCAAAACCACCACCACAGAGAGAATCCTGTACTATT  
 CTGGATACACAAGATCATTGGGAGATGTCGATGATGGAGACACAGTGACGGATTTTCATGGCTCAAGAGCG  
 AGAAAGGGGCATTACCATCCAGTCAGCAGCTGTGACTCTCGACTGGAAAGGGTATAGAGTCAATCTGATT  
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 CCGTGTGGTACGCTCTGCTGGTGTAGAGGCCAGACTCTCACTGTATGGAGGCAAGCTGACAAACACAA  
 AATACCCCGATCTGCTTTTTAAACAAGATGGACAAGACTGGAGCAAGTTTTAACTATGCGGTTGAAAGC  
 ATCCGGGAGAAGTTAAAGGCAAAGCCCCTGATTTTACAGCTGCCAATTGGTGAAGCCAGAAGCTTTCCAAG  
 GAGTGGTGGATGTCGTAACAAAAGAAAACCTCTTTGGAATTCTAACTCTGACGATGGAAGAACTTCGA  
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 GAGACCCATAGTCTCGTCCAAGTCCAGCGCATTAGCTGCAGCTCGCAGAGCCGACGAGGAGAAAGGGA  
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 AGCTGACAAACAGGTGCTGGAACCTCTGATGAGTCTCGAGGTACAGTGAGCAGGGAGTACCTCAGCCCT  
 GTCCTGGCAGACTTGGCACAAGAAGAGGGAACATTAGGAAATCCAGACTCGCCAAGACAACAGAGTTG  
 TTCTAGGATTCGTTCTCTAGCAGAGATTATGTCCCTTCAGCTGGCTGATGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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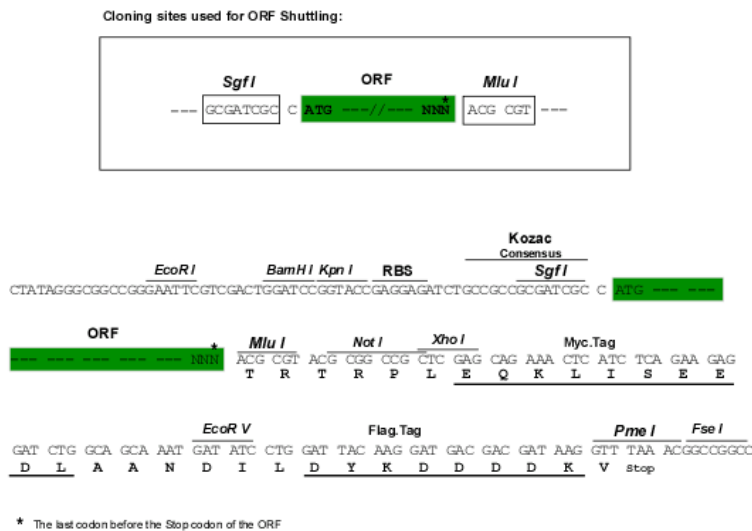
**Protein Sequence:** >MR218049 representing NM\_001146043  
Red=Cloning site Green=Tags(s)

MFTKWRIFAVNHQRTFSVHLNNTMCYCKIKANLKRKLTQLPLTRNYSSAPGIAGSDVKSLHSVINPPVAKI  
 RNIGIMAHIDAGKTTTTTERILYYSGYTRSLGDVDDGDTVDFMAQERERGITIQSAAVTLDWKGYRVNLI  
 DTPGHVDFLEVERCLRVLDGAVAVFDASAGVEAQTLTVWRQADKHKIPRICFLNKMDKTGASFNYAVES  
 IREKLLKAKPLILQLPIGEARTFQGVVDVNVKEKLLWNSNSDDGKDFERMPLSEASDRELLKETIEARNSL  
 IEQVADLDDEFADLVLGEFSENFDLVPAEKLQAAVHRVTLAQAAPVVLGCSALKNKGVQPLLDVAVTTP  
 SPEEREDRFLQWYEGDLCALAFKVLHDKQRGPLVFLRIYSGTLTPQLAVHNINRNCTERMSRLLPFADQ  
 HVEIPSLTAGNIALTVGLKQTATGDTIVSSKSSALAAARRAGRGEREHGKKRAESLLLAGEVPEPVFF  
 CTIEPPSVAKQPDLDHALERLQREDPSLKVKLDPDSGQTVLCGMGELHIEIIHDRIKREYGLETYLGPLQ  
 VAYREILNSVRATDTLDRVLGDKRHLVSAEVRPAEEPCAVAKIEYADCVGEDLLQASREAIASAVHS  
 ACLQGPLLGSPVQDVAMTLHSLMIHPGTSTTMVTACISRCMQKALKKADKQVLEPLMSLEVTVSREYLS  
 VLADLAQRNGNIQEIQTRQDNRVVLFVPLAEIMSLQLADG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001146043

**ORF Size:** 2223 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\\_001146043.2](#), [NP\\_001139515.1](#)

**RefSeq Size:** 4482 bp

**RefSeq ORF:** 2226 bp

**Locus ID:** 320806

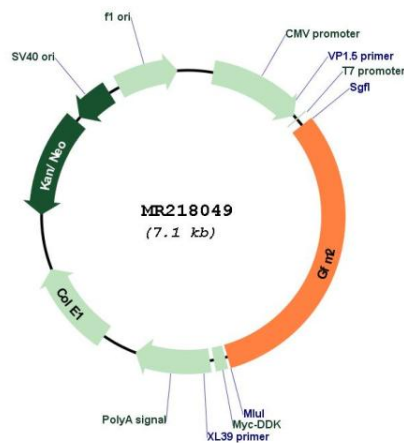
**UniProt ID:** [Q8R2Q4](#)

**Cytogenetics:** 13 D1

**MW:** 82.5 kDa

**Gene Summary:** Mitochondrial GTPase that mediates the disassembly of ribosomes from messenger RNA at the termination of mitochondrial protein biosynthesis. Acts in collaboration with MRRF. GTP hydrolysis follows the ribosome disassembly and probably occurs on the ribosome large subunit. Not involved in the GTP-dependent ribosomal translocation step during translation elongation.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR218049