

## Product datasheet for **SC111592**

### **GFM1 (NM\_024996) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GFM1 (NM_024996) Human Untagged Clone
Tag:	Tag Free
Symbol:	GFM1
Synonyms:	COXPD1; EFG; EFG1; EFGM; EGF1; GFM; hEFG1; mtEF-G1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC111592 sequence for NM\_024996 edited (data generated by NextGen Sequencing)

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ATGAGACTCCTGGGAGCTGCAGCCGTCGCGGCTCTGGGGCGCGGAAGGGCCCCCGCCTCC
CTAGGCTGGCAGAGGAAGCAGGTTAATTGGAAGCCTGCCGATGGTCTTCATCAGGGGTG
ATTCTAATGAAAAATACGAAATATTGGAATCTCAGCTCACATTGATTCTGGAAAACT
ACATTAACAGAACGAGTCCTTTACTACACTGGCAGAATTGCAAAGATGCATGAGGTGAAA
GGTAAAGATGGAGTTGGTGTCTGTCATGGATTCCATGGAAGTACAGAGACAAAGAGGAATC
ACTATTCAGTCAGCAGCCACTTACACCATGTGGAAGATGTCAATATTAACATTATAGAT
ACTCCTGGGCATGTGGACTTCACAATAGAAGTGGAAGGGCCCTGAGAGTGTGGATGGT
GCAGTCTTGTCTCTGTGCTGTTGGAGGGGTACAGTGCCAGACCATGACTGTCAATCGT
CAGATGAAGCGCTACAACGTTCCGTTTCTAACTTTTATTAACAAATTGGACCGAATGGGC
TCCAACCCAGCCAGGGCCCTGCAGCAAATGAGGTCTAACTAAATCATAATGCAGCGTTT
ATGCAGATACCCATGGGTTTGGAGGTAATTTTAAAGGTATTGTAGATCTTATTGAGGAA
CGAGCCATCTATTTTGTGGAGACTTTGGTCAGATTGTTTCGATATGGTGAGATCCAGCT
GAATTAAGGGCGCGGCCACTGACCACCGCAGGAGCTAATTGAATGTGTGCCAATTCA
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TTGAAGAACAAAGGAGTTCAGCCTCTTTTATAGTGTGTTTAGAATACCTCCCAAATCCA
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CCAAAAGTTGCCTTTTCGAGAGACCATTACTGCCCTGTCCGTTTGACTTTACACATAAA
AAACAATCAGGTGGTGCAGGCCAGTATGGAAGTAATAGGTGCTCCTGGAGCCTCTGGAC
CCAGAGGACTACACTAAATTGGAATTTTTCAGATGAAACATTCGGATCAAATATTCCAAG
CAGTTTGTGCCTGCTGTAGAAAAGGGGTTTTTAGATGCCTGCGAGAAGGGCCCTCTTTCT
GGTCAAGCTCTCTGGGCTCCGTTTGTCTGCAAGATGGAGCACACCACATGGTTGAT
TCTAATGAAATCTCTTTCATCCGAGCAGGAGAAGGTGCTCTTAAACAAGCCTTGGCAAAT
GCAACATTATGATTCTTGAACCTATTATGGCTGTGGAAGTTGTAGCTCCAAATGAATTT
CAGGGACAAGTAATTGCAGGAATTAACCGACGCCATGGGGTAATCACTGGGCAAGATGGA
GTTGAGGACTATTTTACTGTATGCAGATGTCCCTCTAAATGATATGTTTGGTTATTCC
ACTGAACTTAGGTCATGCACAGAGGGAAAGGGAGAATACACAATGGAGTATAGCAGGTAT
CAGCCATGTTTACCATCCACACAAGAAGACGTCATTAATAAGTATTTGGAAGCTACAGGT
CAACTTCTGTAAAAAAGGAAAAGCCAAGAATAA

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Clone variation with respect to NM\_024996.5  
 812 a=>n;813 a=>n

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_024996 unedited  AGGCATATTTGTNAATACGCACCCACTATAGGGCGCGCCGCAATTCGCACGAGGCGGGC  CCACGGGACTTTGACGCGTGCTCTGCGCTTGCCATGAGACTCCTGGGAGCTGCAGCCGTC  GCGGCTCTGGGGCGCGGAAGGGCCCCCGCTCCCTAGGCTGGCAGAGGAAGCAGGTTAAT  TGAAGGCCTGCCGATGGTCTTCATCAGGGGTATTCTAATGAAAAATACGAAATATG  GGAATCTCAGCTCACATTGATTCTGGGAAAACTACATTAACAGAACGAGTCCTTTACTAC  ACTGGCAGAATTGCAAAGATGCATGAGGTGAAAGGTAAAGATGGAGTTGGTGCTGTCATG  GATTCCATGGAAGTAGAGAGACAAAGAGGAATCACTATTTCAGTCAGCAGCCACTTACACC  ATGTGGAAAGATGTCAATATTAACATTATAGATACTCCTGGGCATGTGGACTTCACAATA  GAAGTGGAAAGGGCCCTGAGAGTGTGGATGGTGACAGTCCTTGTCTCTGTGCTGTTGGA  GGGGTACAGTGCCAGACCATGACTGTCAATCGTCAGATGAAGCGCTACAACGTTCCGTTT  CTAACTTTTATTAACAAATTGGACCGAATGGGCTCCAACCCAGCCAGGGCCCTGCAGCAA  ATGAGGTCTAACTCAATCATAATGCAGCGTTTATGCAAATACCCATGGGTTTGGAGGGT  AATTTTAAAGGTATTGTAATCTTATTGAGGAACGAGCCATCTATTTTGTGGAGACCTT  TGTCANATTGTTGCAATGGTGAGATCCACCTGAAATAGGGGCGCNGCCACTGACCACGGN  CGGGGCTAATTGAATGGGTTGCCATTAAGACACCTTGTGAGATGTTTCGGAA</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_024996 unedited  CTTTGAACCGGCGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  TTTTTTTTTTTTTTTCCAAATTAAGTACTGATTTAGGTTGATGAACTAACTCTATAA  ATTACATTTGATTTACCTGTCCAAAACTTTAAGATGAACACAAACAAGAATAGTTTATG  CAAGGGTCTACTTTTTACTTACAATAAACCCAGGGGAAGTNAATACTTATACTCCTAA  AACAGAGGCAGTTACAAATTTGCAGAAACCACAACTGAAATAAACAGACTTTTTAAAA  CAGAGAGAAATTGGGCTAATATTTAATATCCCAATGAAGAATCTGAAACACTCTCTAT  GAAGAAATACGGAATCCACTCTTCAACAGAAAAGCCTGCCATTAATGACTCCAAAGAA  GTTTCATGATATATGCGATTCACTTTCAAGTCTCAGCAAATAAAATAGAGTNTTGAGAC  TTAAACAGATAATGGACGGTGAAAGCAAATNTGACAAAACAAATATTTTGTATAAACAA  CCCGTTAAACAAGGAAGTANNATGAAAGTTGTGGTATCCTTTGCATTTTTTCAGCTTTCTCT  ATGTGAAACTCTTATGATCAAAAATNGAAAATGACTACATTCTAAGCTAAAAGTTACTG  AAATAGTCTCTTTCCCTAAATATTAACATTTTCAGNATAATATTTTAAATTTGGGATTT  TCATGACTTTAAACCAATCATTGAGTGGAAATGACTAGAATACCTTTGAATTAACAAACC  TCTGAATTAACAAAAAGGCTTTTTTGAAGAAAAAACCCGTTTCTGGGCTAAAATTTTTG  TTTAACACCCGAATTTTTCCCTGGATCCCTCAAGGTAAACCCCCATTCTTTAGGTGCG  CCACTCCATAGCAAGTTATTTTTGCTTTCTTTTAAAAGAAAGGCCGACTCCAATCTT  TAAAA</p>
<b>Restriction Sites:</b>	ECoRI-NOT
<b>ACCN:</b>	NM_024996
<b>Insert Size:</b>	3110 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_024996.5</a> , <a href="#">NP_079272.4</a>
<b>RefSeq Size:</b>	3468 bp
<b>RefSeq ORF:</b>	2256 bp
<b>Locus ID:</b>	85476
<b>UniProt ID:</b>	<a href="#">Q96RP9</a>
<b>Cytogenetics:</b>	3q25.32
<b>Domains:</b>	EFG_C, GTP_EFTU, GTP_EFTU_D2, EFG_IV
<b>Gene Summary:</b>	<p>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. Its role in the regulation of normal mitochondrial function and in different disease states attributed to mitochondrial dysfunction is not known. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region compared to variant 1. It encodes isoform 2 which is shorter, compared to isoform 1.</p>