

Product datasheet for **SC324018**

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:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_024996.5
 CTTCCCGGTGCGTTACCGGCAGCTGAACCCACCCGGCGCCACGGGACTTTGACGCGTGCT
 CTGCGCTTGCCATGAGACTCCTGGGAGCTGCAGCCGTCGCGGCTCTGGGCGCGGAAGGG
 CCCCCGCCTCCCTAGGCTGGCAGAGGAAGCAGGTTAATTGGAAGCCCTGCCGATGGTCTT
 CATCAGGGGTGATTCTAATGAAAAATACGAAATATTGGAATCTCAGCTCACATTGATT
 CTGGGAAAACATTAACAGAACGAGTCCTTTACTACTGGCAGAATTGCAAAGATGC
 ATGAGGTGAAAGGTAAAGATGGAGTTGGTGTGTCATGGATTCCATGGAAGTACAGAGAC
 AAAGAGGAATCACTATTCAGTCAGCAGCCACTTACACCATGTGGAAAGATGTCAATATTA
 ACATTATAGATACTCCTGGGCATGTGGACTTCACAATAGAAGTGGAAAGGGCCCTGAGAG
 TGTTGGATGGTGCAGTCCTTGTCTCTGTGCTGTTGGAGGGGTACAGTCCAGACCATGA
 CTGTCAATCGTCAGATGAAGCGCTACAACGTTCCGTTTCTAACTTTTATAACAAATTGG
 ACCGAATGGGCTCCAACCCAGCCAGGGCCCTGCAGCAAAATGAGGTCTAAACTAAATCATA
 ATGCAGCGTTTATGCAGATACCCATGGGTTTGGAGGGTAATTTTAAAGGTATTGTAGATC
 TTATTGAGGAACGAGCCATCTATTTTATGAGACTTTGGTCAGATTGTTTCGATATGGTG
 AGATTCAGCTGAATTAAGGGCGCGGCCACTGACCACCGGCAGGAGCTAATTGAATGTG
 TTGCCAATTCAGATGAACAGCTTGGTGAGATGTTTCTGGAAGAAAAATCCCCTCGATTT
 CTGATTTAAAGCTAGCAATTCGAAGAGCTACTCTGAAAAGATCATTTACTCCTGTATTTT
 TGGGAAGCGCCTTGAAGAACAAAGGAGTTCAGCCTCTTTTAGATGCTGTTTTAGAATACC
 TCCCAAATCCATCTGAAGTCCAGAACTATGCTATTCTCAATAAAGAGGATGACTCAAAG
 AGAAAACCAAAATCCTAATGAACTCCAGTACAGACAATTCACACCATTTGTAGGCTGG
 CTTTTAACTGGAGGTAGGTCGATTTGGACAATTAACCTATGTTTCGAGTTATCAGGGAG
 AGCTAAAGAAGGGTGACACCATCTATAACAAGGACAAGAAAGAAAGTACGGTTGCAAC
 GGCTGGCTCGCATGCATGCCGACATGATGGAGGATGTTGAGGAAGTATATGCCGGAGACA
 TCTGTGCATTGTTGGCATTGACTGTGCTAGTGGAGACACATTACAGACAAAGCCAACA
 GCGGCCTTTCTATGGAGTCAATTCATGTTCTGATCCTGTCAATTAAGCAATGAAGC
 CTTCTAACAAGAACGATCTGAAAAATTTCAAAGGTATTGGCAGGTTTACAAGAGAAG
 ATCCACATTTAAAGTATACTTTGACACTGAGAACAAGAGACAGTTATATCTGGAATGG



[View online »](#)

GAGAATTACACCTGAAATCTATGCTCAGAGGCTGAAAGAGAGTATGGCTGTCCTTGTA
 TCACAGGAAAGCCAAAAGTTGCCTTTCGAGAGACCATTACTGCCCTGTCCCGTTTGACT
 TTACACATAAAAAACAATCAGGTGGTGCAGGCCAGTATGGAAAAGTAATAGGTGTCCTGG
 AGCCTCTGGACCCAGAGGACTACACTAAATTGGAATTTTCAGATGAAACATTCGGATCAA
 ATATCCAAAGCAGTTTGTGCCTGCTGTAGAAAAGGGGTTTTAGATGCCTGCGAGAAGG
 GCCCTCTTCTGGTCACAAGCTCTCTGGGCTCCGGTTTGTCTGCAAGATGGAGCACACC
 ACATGGTTGATTCTAATGAAATCTCTTTCATCCGAGCAGGAGAAGGTGCTCTTAAACAAG
 CCTTGGCAAATGCAACATTATGTATTCTTGAACCTATTATGGCTGTGGAAGTTGTAGCTC
 CAAATGAATTTACAGGACAAGTAATTGCAGGAATTAACCGACGCCATGGGGTAATCACTG
 GGCAAGATGGAGTTGAGGACTATTTTACTGTATGCAGATGTCCCTCTAAATGATATGT
 TTGGTTATTCCACTGAACCTTAGGTCATGCACAGAGGGAAAGGAGAATACACAATGGAGT
 ATAGCAGGTATCAGCCATGTTTACCATCCACACAAGAAGACGTCATTAATAAGTATTTGG
 AAGCTACAGGTCAACTTCTGTAAAAAAGGAAAAGCCAAGAATACTTTGCTTACTGT
 GAGTTGACTGACTCTAATTGAATCTGCGTGGTTTTGATACTTTGATGGATTCCAGTGAA
 TAAATTCAGGCTGCTGAAACAAGAAATCTGAGCCAGGAAGCGGGCTCTCTTTCTTCA
 AAAGAAGCCCTTCTGTTCATATTCAGGAGCTTCTGTTATATTCAAAGGTAATTCTATGT
 CTATCTCAACTCTATTGATTGGTTTTATAGTTCATTGAAAATCCTCAAATAAAATAAT
 TATTACTGAAATATGTTAATATTTAAGGGGAAAAGAGACTAATTTCAAGTTATACCTTTA
 AGCTTAGAATGTATGTTCAATTTCCAAATTTTGTATCATAAGAGTTTTCAACATAGAGAAA
 AGCTGAAAAATGCAAAGAATAACCACATACTTTCCATCTACCTTCTTTGTTAACGGGT
 TGTATCATATAATAATTTGTTTGTTCATATTTGCTTCTACTGTCTATTATCTGTTTAA
 GTCTCATAACTCTATTTTAGTTTGTGCTGAAGACTTGAAGTGAATCGCATATATCATGAC
 ACTTCTTGGAGTGCATTAATGGGCAGGCTTTTCTGTTGAAGAGTGGATTCCGTATGTTT
 TTCATAGAGAGTGTTCAGATTCTTCATTGGGATATTAATATTAGCCAAAAA
 AAAAAA

Restriction Sites: EcoRI-NOT

ACCN: NM_024996

OTI Disclaimer: 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_024996.5](#), [NP_079272.4](#)

RefSeq Size: 3468 bp

RefSeq ORF:	2256 bp
Locus ID:	85476
UniProt ID:	Q96RP9
Cytogenetics:	3q25.32
Domains:	EFG_C, GTP_EFTU, GTP_EFTU_D2, EFG_IV
Gene Summary:	<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>