

## Product datasheet for **MG224586**

### Fxn (NM\_008044) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Fxn (NM\_008044) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Fxn  
**Synonyms:** FA; FARR; Frda; X25  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG224586 representing NM\_008044  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTGGCGTTTCGGAGGTCGCGCAGCCGTGGGCTTGTGCCCCGGACGGCGTCCCGGGCCTCCGCCTGGG  
 TCGGGAACCCGCGCTGGAGGGAACCGATCGTAACCTGCGGCCCGAGGCCTACATGTCACAGTCAACGC  
 CGGCGCCACCCGCCACGCCCATTTGAACCTCCACTACCTCCAGATTCTGAACATCAAAAAGCAGAGCGTC  
 TCGTGGTGCATTTGAGGAAGTGGGGACATTGGACAACCAAGCTCTTAGACGAGACAGCGTATGAAA  
 GACTGGCGGAAGAGACCCTGGACTCCCTGGCCGAGTTCTTTGAAGACCTCGCAGACAAGCCCTATACCT  
 GGAGGACTACGATGTCTCTTTGGGGATGGCGTCTCACCATAAGCTGGGCGGGGATCTAGGGACCTAC  
 GTGATCAACAAGCAGACCCCAACAAGCAAATCTGGCTGTCTTCTCCTCCAGCGGCCCAAGCGCTATG  
 ACTGGACCGGGAAGAAGTGGGTGTACTCTCATGACGGCGTGTCTCTGCATGAGCTGCTGGCCAGGGAGCT  
 GACTAAAGCTTTAAACACCAAAGTGGACTTGTCTTATTGGCCTATTCTGGAAAAGGCACT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG224586 representing NM\_008044  
 Red=Cloning site Green=Tags(s)

MWAFGGRAAVGLLPRTASRASAWVGNPRWREPIVTCGRRGLHVTVNAGATRHAHLNLHYLQILNIKKQSV  
 CVVHLRNLGTLDPSSLDLAEETLDSLAEFFEDLADKPYTLEDYDVVSFGDGLVTKLGGDLGTY  
 VINKQTPNKQIWLSSPSSGPKRYDWTGKNWVYSHDGVSLHELLARELTKALNTKLDLSSLAYSQKGT

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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Cloning Scheme:



ACCN: NM\_008044

ORF Size: 621 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\\_008044.3](#)

RefSeq Size: 1095 bp

RefSeq ORF: 624 bp

Locus ID: 14297

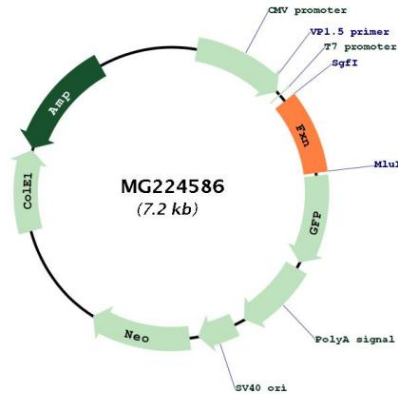
UniProt ID: [O35943](#)

Cytogenetics: 19 B

**Gene Summary:**

Promotes the biosynthesis of heme and assembly and repair of iron-sulfur clusters by delivering Fe(2+) to proteins involved in these pathways. May play a role in the protection against iron-catalyzed oxidative stress through its ability to catalyze the oxidation of Fe(2+) to Fe(3+); the oligomeric form but not the monomeric form has in vitro ferroxidase activity. May be able to store large amounts of iron in the form of a ferrihydrite mineral by oligomerization. Modulates the RNA-binding activity of ACO1 (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG224586