

Product datasheet for **SC113849**

Mitofusin 1 (MFN1) (NM_017927) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mitofusin 1 (MFN1) (NM_017927) Human Untagged Clone
Tag:	Tag Free
Symbol:	Mitofusin 1
Synonyms:	DKFZp762F247; FLJ20693; hfzo1; hfzo1, hfzo2, FLJ20693, MGC41806, DKFZp762F247; hfzo2; MGC41806; mitochondrial transmembrane GTPase Fzo-1; mitochondrial transmembrane GTPase FZO-2; mitofusin 1; putative transmembrane GTPase
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_017927, the custom clone sequence may differ by one or more nucleotides

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ATGGCAGAACCTGTTTCTCCACTGAAGCACTTTGTGCTGGCTAAGAAGGCGATTACTGCAATCTTTGACC
AGTTACTGGAGTTTGTACTGAAGGATCACATTTTGTGAAGCAACATATAAGAATCCGGAACCTTGATCG
AATAGCCACTGAAGATGATCTGGTAGAAATGCAAGGATATAAAGACAAGCTTTCCATCATTGGTGAGGTG
CTATCTCGGAGACACATGAAGGTGGCATTTTTTGGCAGGACAAGCAGTGGGAAGAGCTCTGTTATCAATG
CAATGTTGTGGGATAAAGTTCTCCCTAGTGGGATTGGCCATATAACCAATTGCTTCCTAAGTGTGAAGG
AACTGATGGAGATAAAGCCTATCTTATGACAGAAGGATCAGATGAAAAAAGAGTGTGAAGACAGTTAAT
CAACTGGCCCATGCCCTTACATGGACAAAGATTTGAAAGCTGGCTGTCTGTACGTGTGTTTTGGCCAA
AAGCAAAATGTGCCCTCTTGAGAGATGACCTGGTGTAGTAGACAGTCCAGGCACAGATGCTACTACAGA
GCTGGATAGCTGGATTGATAAGTTTTGCCTAGATGCTGATGTCTTTGTTTTGGTCGAAACTCTGAATCA
ACACTAATGAATACGGAAAAACACTTTTTTCAAAAGTGAATGAGCGGCTTTCCAAGCCTAATATTTTCA
TTCTCAATAATCGTTGGGATGCCTCTGCATCAGAGCCAGAATATATGGAAGACGTACGCAGACAGCAT
GGAAAGATGCCTGCATTTCTGGTGGAGGAGCTCAAAGTTGTAATGCTTTAGAAGCACAGAATCGTATC
TTCTTTGTTTCAGCAAAGGAAGTTCTTAGTGCTAGAAAGCAAAAAGCACAGGGGATGCCAGAAAGTGGTG
TGGCACTTGCTGAAGGATTTTCATGCAAGATTACAGGAATTTGAGAATTTGAACAAATCTTTGAGGAGTG
TATCTCGCAGTCAGCAGTGAAAACAAAGTTGCAACAGCACACTATCAGAGCTAAACAGATACTAGCTACT
GTGAAAAACATAATGGATTTCAGTAAACCTGGCAGCTGAAGATAAAAGTTTCATGTGCAATGA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_017927 unedited
 NGTAACGTCAAAATTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGCTTTA
 ACTTCTCGGGAAGATGAGGCAGTTTGGCATCTGTGGCCGAGTTGCTGTTGCCGGGTGATA
 GTTGGAGCGGAGACTTAGCATAATGGCAGAACCTGTTTCTCCACTGAAGCACTTTGTGCT
 GGCTAAGAAGCGGATTACTGCAATCTTTGACCAGTTACTGGAGTTTGTACTGAAGGATC
 ACATTTTGTGTAAGCAACATATAAGAATCCGGAACCTTGATCGAATAGCCACTGAAGATGA
 TCTGGTAGAAATGCAAGGATATAAAGACAAGCTTCCATCATTGGTGAGGTGCTATCTCG
 GAGACACATGAAGGTGGCATTGTTTGGCAGGACAAGCAGTGGAAGAGCTCTGTTATCAA
 TCCAATGTTGTGGGATAAAGTTCTCCCTAGTGGGATTGGCCATATAACCAATTGCTTCT
 AAGTGTGAAGGAACTGATGGAGATAAAGCCTATCTTATGACAGAAGGATCAGATGAAAA
 AAAGAGTGTGAAGACAGTTAATCAACTGGCCCATGCCCTTACATGGACAAAGATTTGAA
 AGCTGGCTGTCTGTACGTGTGTTTGGCCAAAAGCAAAATGTGCCCTCTTGAGAGATGA
 CCTGGTGTAGTAGACAGTCCAGGCACAGATGCTACTACAGAGCTGGATAGCTGGATTGA
 TAAGTTTTGCCTAGATGCTGATGCTTTGTTTTGGTCGCAAACTCTGAATCAACACTAAT
 GAATACNGAAAAACACTTTTTTACAAGGTGAATNGAGCGCTTCCAAGCCCTATATTTT
 CATTCTCATAATCGTTGGGATGCCTCTGCATCAGAGCCAGATATATC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_017927 unedited
 GCCGCAATCTAGAATCGAGTTTTTTTTTTTTTTTTTTTCATTAAGGTAAAAACAATAAT
 AATTCTTTAATGGAAATCCTGGAAAAATTCATACAAATAAAATTAAGGCTCCAATGGG
 GTATAATCCAGCAATATCCTAGGCAATGCCTCCTGAAGAACAACAGCCTTTTTTAAAC
 ATCACTGTTTATCATTCAAAATCAAACGTCTCCTATCTTTGGCTATTTTATCTCTTCA
 AACTTTACTCCTAAAATGCACTAGGAAAGCGTTCCTTATTGGAATCATAATGGGAGCAA
 AGCTGAAAAATGTTTCTTTAGAAACATCTAAGGAAATTACTTAGACCAGATACTTATAAG
 TGAATAAACAAGCCTTTATCCTGTTTTACATCAGTTTTAACGGGAATAAAAAGTAAAAA
 CACATTTATTAGTGTTCACATAGCTGCCATGATGGCAACGTGACTGTGACTTGCAAAA
 TAATACTCAAGGACATTCCACTCCTTGGTGGTCCAGCAATGCGATTTACTAAATA
 AAAAGTGACTATTCCCATGAAAGAAAGCATCAAAAAGTGTGAGAAAGAAGATGAA
 AGGCTCAATCTCTAACTCCTGGATGCCAGGAAGCAGATTTTTTCCAGAAATCAAAAACAAAT
 TAAGAGCTCACAGCCCCACCCCTCAGGGTCCACATAAGTTGGTACTGTTGCTTGAACATA
 ATTCATGATTTAGCCTTTTCTTACTCAAAATTAAGGACATAACACTCTTCAA
 AATACACATACCCTGAGACAGATCATTACCAGAATCTACACAGGGCTTTGCTATTTAGGT
 ACAGTTAGTACAATTCATATTTAAAGTAATTTCAAAAAATAACAAGTCCCAATNNCT
 ACAGTTNCGNTNCTCCTATCATGGCACCAAGCATCTCTATGGTAGGATNCTNCTATGCTC
 GAAGTAGAAAAGTCTATAAAATCTCACTCATTTCAAGTGACAGCTTT

Restriction Sites:

NotI-NotI

ACCN:

NM_017927

Insert Size:

3000 bp

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).

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_017927.2](#), [NP_060397.2](#)

RefSeq Size: 3400 bp

RefSeq ORF: 1113 bp

Locus ID: 55669

Cytogenetics: 3q26.33

Gene Summary: The protein encoded by this gene is a mediator of mitochondrial fusion. This protein and mitofusin 2 are homologs of the *Drosophila* protein fuzzy onion (Fzo). They are mitochondrial membrane proteins that interact with each other to facilitate mitochondrial targeting. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (2) lacks a 127 nt exon as compared to variant 1, resulting in a frameshift and use of an earlier stop codon. Isoform 2 is 371 aa shorter than isoform 1.