

## Product datasheet for **RG236377**

### MDFI (NM\_001300805) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MDFI (NM\_001300805) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** MDFI  
**Synonyms:** I-MF; I-mfa  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236377 representing NM\_001300805.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTACCAGGTGAGCGGCCAGCGCCCTCTGGCTGCGACGCGCCCTATGGAGCCCCAGCGCAGCCCCG
GGCCAGGCCAGCCTCAGGGGAACCCCTGGGCTGCACCCCACTTCTGCCGAATGACTCTGGCCACCCC
TCAGAGCTGGGCGGCACAGACGGGCGGGGAATGGTGCCTGGGTGGCCCAAGGCCACCAGGAAGTTG
CAGACACACCCATCTCTGCCAGCCAGGGCAGCAAGAAGAGTAAGAGCAGCAGCAATCCACCACCTCC
CAGATCCCCCTCCAGGCACAGGAAGACTGCTGTGTCCACTGCATCCTGTCTGCCTGTTCTGCGAGTTC
CTGACGCTGTGCAACATCGTCTGGACTGCGCCACCTGTGGCTCCTGCAGCTCGGAGGACTCGTGCCTC
TGCTGCTGCTGTGGCTCTGGCGAGTGTGCCGACTGCGACCTGCCCTGCGACCTGGACTGCGGCATC
CTGGATGCTGCTGCGAGTCCGGGACTGCCTGGAGATCTGCATGGAGTGCTGTGGGCTCTGCTTCTCC
TCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236377  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MYQVSGQRPSGCDAPYGAPSAAPGPGQPQGNPLGCTPLLPNDSGHPSELGGTRRAGNGALGGPKAHRKL
QTHPSLASQGSKSKSSKSTTSQIPLQAQEDCCVHCILSCLFCEFLTLCNIVLDCATCGSCSSEDSCL
CCCCGSGECADCDLPCDLDCGILDACCESADCLEICMECCGLCFSS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPYSGYENPFLHAINNGYTNRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERY
```

**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**

Cloning sites used for ORF Shutting:



```

                                Kozac
                                Consensus
                                SgfI   AscI
                                -----
EcoRI   BamHI KpnI   RBS
CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

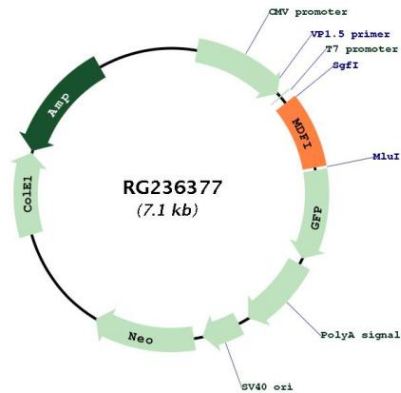
HindIII  NheI  RsrII  MluI      NotI   XhoI      GFP Tag
CAAGCTTAAGTACTAGCTAGCGGACCG  ACG CGT  ACG CGG  CCG CTC GAG  ATG GAG AGC GAC -----
                                  T  R  T  R  P  L  E  M  E  S  D  -  -  -

                                PmeI   FseI
                                -----
- - - GAA GAA AGA GTT TAA ACGGCCGGCCCGGAGCT
- - - E  E  R  V  Stop
    
```

<b>ACCN:</b>	NM_001300805
<b>ORF Size:</b>	555 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>RefSeq:</b>	<a href="#">NM_001300805.2</a>
<b>RefSeq Size:</b>	1451 bp
<b>RefSeq ORF:</b>	558 bp
<b>Locus ID:</b>	4188
<b>UniProt ID:</b>	<a href="#">Q99750</a>
<b>Cytogenetics:</b>	6p21.1
<b>Protein Families:</b>	Transcription Factors
<b>MW:</b>	19.4 kDa

**Gene Summary:**

This protein is a transcription factor that negatively regulates other myogenic family proteins. Studies of the mouse homolog, I-mf, show that it interferes with myogenic factor function by masking nuclear localization signals and preventing DNA binding. Knockout mouse studies show defects in the formation of vertebrae and ribs that also involve cartilage formation in these structures. [provided by RefSeq, Jul 2008]

**Product images:**

Circular map for RG236377