

## Product datasheet for **RC209108**

### MYOD1 (NM\_002478) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYOD1 (NM_002478) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYOD1
Synonyms:	bHLHc1; MYF3; MYOD; MYODRIF; PUM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209108 representing NM_002478. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
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```



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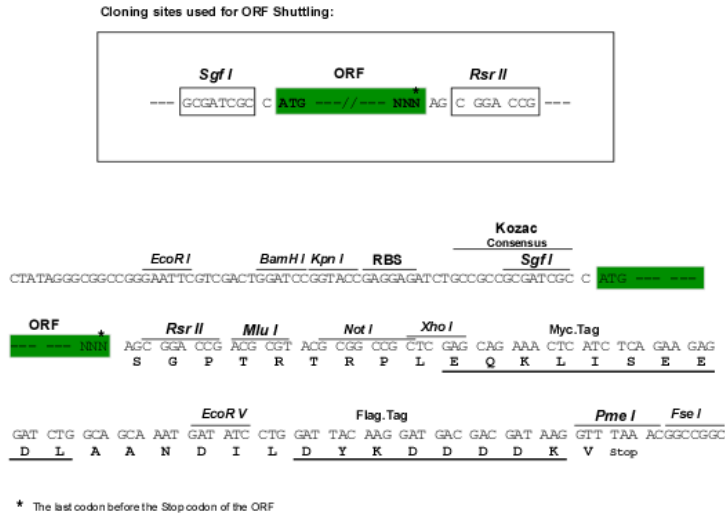
**Protein Sequence:** >Peptide sequence encoded by RC209108  
 Blue=ORF Red=Cloning site Green=Tag(s)

MELLSPPLRDVDLTAPDGLSCSFATDDDFYDDPCFDPDLRFFEDLDPRLMHVGALLKPEEHSHPAAV  
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 NPNQRLPKVEILRNAIRYIEGLQALLRDQDAAPPAAAAFYAPGPLPPGRGGEHYSGDSDASSPRSNCS  
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 ESPPRRQEAAAPSEGESSGDPTQSPDAAPQCPAGANPNPIYQVL  
 SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6183\\_c02.zip](https://cdn.origene.com/chromatograms/mk6183_c02.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_002478

**ORF Size:** 960 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_002478.5](#)

**RefSeq Size:** 1823 bp

**RefSeq ORF:** 963 bp

**Locus ID:** 4654

**UniProt ID:** [P15172](#)

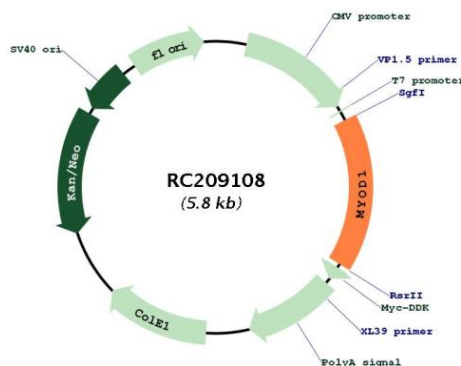
**Cytogenetics:** 11p15.1

**Protein Families:** Druggable Genome, Transcription Factors

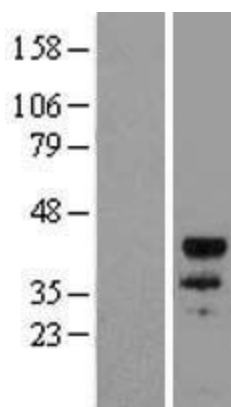
**MW:** 34.5 kDa

**Gene Summary:** This gene encodes a nuclear protein that belongs to the basic helix-loop-helix family of transcription factors and the myogenic factors subfamily. It regulates muscle cell differentiation by inducing cell cycle arrest, a prerequisite for myogenic initiation. The protein is also involved in muscle regeneration. It activates its own transcription which may stabilize commitment to myogenesis. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC209108



Western blot validation of overexpression lysate (Cat# [LY400881]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209108 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).