

Product datasheet for **RG205616**

Myozenin 2 (MYOZ2) (NM_016599) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myozenin 2 (MYOZ2) (NM_016599) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myozenin 2
Synonyms:	C4orf5; CMH16; CS-1; FATZ-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205616 representing NM_016599 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTATCACATAACTATGATGAAGCAGAGAAAACAGCAAGCAACAGCCATCATGAAGGAAGTCCATG
GAAATGATGTTGATGGCATGGACCTGGGCAAAAAGGTCAGCATCCCCAGAGACATCATGTTGGAAGAATT
ATCCCATCTCAGTAACCGTGGTCCAGGCTATTTAAGATGCGTCAAAGAAGATCTGACAAATACACATTT
GAAAATTTCCAGTATCAATCTAGAGCGCAAATAAATCACAGTATTGCTATGCAGAATGGGAAAGTGGATG
GAAGTAACCTGGAAGGTGGTTCGCAGCAAGCCCCCTTGACTCCTCCCAACACCCCAGATCCACGAAGCCC
TCCAAATCCAGACAACATTGCTCCAGGATATTCTGGACCACTGAAGGAAATTCCTCTGAAAAATTC AAC
ACCACAGCTGTCCCTAAGTACTATCAATCTCCCTGGGAACAAGCCATTAGCAATGATCCGGAGCTTTTAG
AGGCTTTATATCCTAACTTTTCAAGCCTGAAGGAAAGGCAGAAGTGCCTGATTACAGGAGCTTTAACAG
GGTTGCCACACCATTTGGAGGTTTTGAAAAAGCATCAAGAATGGTTAAATTTAAAGTTCCAGATTTTGAG
CTACTATTGCTAACAGATCCCAGGTTTATGTCCTTTGTCAATCCCTTTCTGGCAGACGGTCTTTAATA
GGACTCCTAAGGGATGGATATCTGAGAATTCCTATAGTGATAACAACCGAACCTACAGATGATACCAC
TGTACCAGAATCAGAAGACCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205616 representing NM_016599
 Red=Cloning site Green=Tags(s)

MLSHTMMKQRKQQATAIMKEVHGNDVDGMDLGKVKVIPRDIIMLEELSHLSNRGARLFKMRQRSDKYTF
 ENFYQYQSRQINHSIAMQNGKVDGSNLGGSSQAPLTPPNTDPDRSPPNPNDNIAPGYSGPLKEIPPEKFN
 TTAVPKYYQSPWEQAISNDPELLEALYPKLFKPEGKALPDYRSFNRVATPFGGFEKASRMVKFKVPDFE
 LLLLTDPRFMSFVNPLSGRRSFNRTPKGWISENIPIVITTEPTDDTTVPESEDL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016599

ORF Size: 792 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_016599.2](#), [NP_057683.1](#)

RefSeq Size: 2532 bp

RefSeq ORF: 795 bp

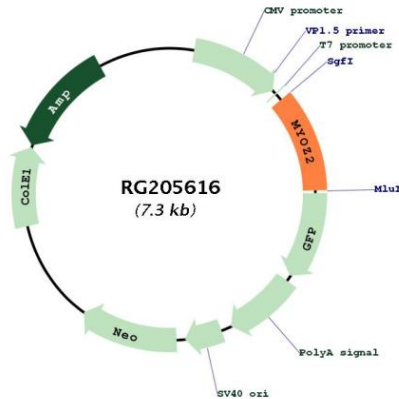
Locus ID: 51778

UniProt ID: [Q9NPC6](#)

Cytogenetics: 4q26

Gene Summary: The protein encoded by this gene belongs to a family of sarcomeric proteins that bind to calcineurin, a phosphatase involved in calcium-dependent signal transduction in diverse cell types. These family members tether calcineurin to alpha-actinin at the z-line of the sarcomere of cardiac and skeletal muscle cells, and thus they are important for calcineurin signaling. Mutations in this gene cause cardiomyopathy familial hypertrophic type 16, a hereditary heart disorder. [provided by RefSeq, Aug 2011]

Product images:



Circular map for RG205616