OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC205616

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:	Myc-DDK
Symbol:	Myozenin 2
Synonyms:	C4orf5; CMH16; CS-1; FATZ-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205616 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTATCACATAATACTATGATGAAGCAGAGAAAACAGCAAGCAACAGCCATCATGAAGGAAGTCCATG
GAAATGATGTTGATGGCATGGACCTGGGCAAAAAGGTCAGCATCCCCAGAGACATCATGTTGGAAGAATT
ATCCCATCTCAGTAACCGTGGTGCCAGGCTATTTAAGATGCGTCAAAGAAGATCTGACAAATACACATTT
GAAAATTTCCAGTATCAATCTAGAGCGCAAATAAATCACAGTATTGCTATGCAGAATGGGAAAGTGGATG
GAAGTAACTTGGAAGGTGGTTCGCAGCAAGCCCCCTTGACTCCTCCCAACACCCCAGATCCACGAAGCCC
TCCAAATCCAGACAACATTGCTCCAGGATATTCTGGACCACTGAAGGAAATTCCTCCTGAAAAATTCAAC
ACCACAGCTGTCCCTAAGTACTATCAATCTCCCTGGGAACAAGCCATTAGCAATGATCCGGAGCTTTTAG
AGGCTTTATATCCTAAACTTTTCAAGCCTGAAGGAAAGGCAGAACTGCCTGATTACAGGAGCTTTAACAG
GGTTGCCACACCATTTGGAGGTTTTGAAAAAGCATCAAGAATGGTTAAATTTAAAGTTCCAGATTTTGAG
CTACTATTGCTAACAGATCCCAGGTTTATGTCCTTTGTCAATCCCCTTTCTGGCAGACGGTCCTTTAATA
GGACTCCTAAGGGATGGATATCTGAGAATATTCCTATAGTGATAACAACCGAACCTACAGATGATACCAC
TGTACCAGAATCAGAAGACCTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC205616 protein sequence
Red=Cloning site Green=Tags(s)

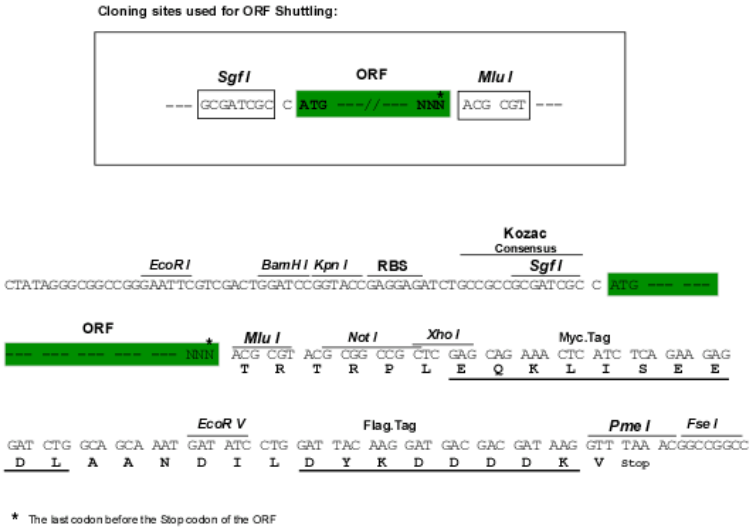
MLSHNTMMKQRKQQATAIMKEVHGNDVDGMDLGKKVSIPRDIMLEELSHLSNRGARLFKMRQRRSDKYTF
ENFQYQSRAQINHSIAMQNGKVDGSNLEGGSQQAPLTPPNTPDPRSPPNPDNIAPGYSGPLKEIPPEKFN
TTAVPKYYQSPWEQAISNDPELLEALYPKLFKPEGKAELPDYRSFNRVATPFGGFEKASRMVKFKVPDFE
LLLLTDPRFMSFVNPLSGRRSFNRTPKGWISENIPIVITTEPTDDTTVPESEDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6171_e09.zip

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_016599.5

RefSeq Size: 2604 bp

RefSeq ORF: 795 bp

Locus ID: 51778

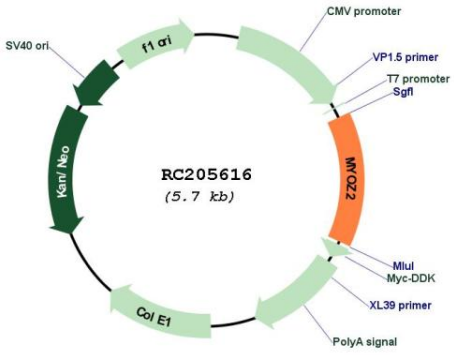
UniProt ID: Q9NPC6

Cytogenetics: 4q26

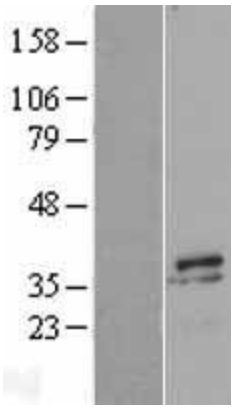
MW: 29.9 kDa

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 RC205616



Western blot validation of overexpression lysate (Cat# [LY402571]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205616 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).