

## Product datasheet for **RC213673**

### ASD3 (MYH6) (NM\_002471) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ASD3 (MYH6) (NM_002471) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ASD3
Synonyms:	alpha-MHC; ASD3; CMD1EE; CMH14; MYHC; MYHCA; SSS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213673 representing NM_002471 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACCGATGCCAGATGGCTGACTTTGGGGCAGCGGCCAGTACCTCCGCAAGTCAGAGAAGGAGCGTC  
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AACCACCACATGTTCTGCTGGAGCAGGAGGAGTACAAGAAGGAGGGCATTGAGTGGACATTCATTGACT  
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**Protein Sequence:**

>RC213673 representing NM\_002471  
 Red=Cloning site Green=Tags(s)

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 ANTNLKFRKVVQHELDEAEERADIAESQVNKLRAKSRDYGAKQKMHDEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8119\\_b11.zip](https://cdn.origene.com/chromatograms/mk8119_b11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_002471

**ORF Size:** 5817 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_002471.4](#)

**RefSeq Size:** 5941 bp

**RefSeq ORF:** 5820 bp

**Locus ID:** 4624

**UniProt ID:** [P13533](#)

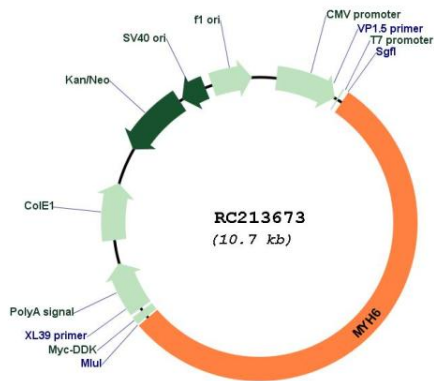
**Cytogenetics:** 14q11.2

**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Tight junction, Viral myocarditis

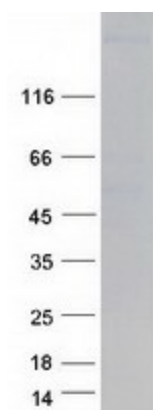
**MW:** 224.2 kDa

**Gene Summary:** Cardiac muscle myosin is a hexamer consisting of two heavy chain subunits, two light chain subunits, and two regulatory subunits. This gene encodes the alpha heavy chain subunit of cardiac myosin. The gene is located approximately 4kb downstream of the gene encoding the beta heavy chain subunit of cardiac myosin. Mutations in this gene cause familial hypertrophic cardiomyopathy and atrial septal defect 3. [provided by RefSeq, Feb 2017]

**Product images:**



Circular map for RC213673



Coomassie blue staining of purified MYH6 protein (Cat# [TP313673]). The protein was produced from HEK293T cells transfected with MYH6 cDNA clone (Cat# RC213673) using MegaTran 2.0 (Cat# [TT210002]).