

Product datasheet for **SC309209**

ASD3 (MYH6) (NM_002471) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASD3 (MYH6) (NM_002471) Human Untagged Clone
Tag:	Tag Free
Symbol:	ASD3
Synonyms:	alpha-MHC; ASD3; CMD1EE; CMH14; MYHC; MYHCA; SSS3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_002471 edited
CGGCCAGGGGAAGCACCAAGATGACCGATGCCAGATGGCTGACTTTGGGGCAGCGGCC
CAGTACCTCCGCAAGTCAGAGAAGGAGCGTCTAGAGGCCAGACCCGGCCCTTTGACATT
CGCACTGAGTGCTTCGTGCCGATGACAAGGAAGAGTTTGTCAAAGCCAAGATTTGTCC
CGGGAGGGAGGCAAGGTCATTGCTGAAACCGAGAATGGGAAGACGGTGACTGTGAAGGAG
GACCAGGTGTTGCAGCAGAACCCACCAAGTTCGACAAGATTGAGGACATGGCCATGCTG
ACCTTCTGCACGAGCCCGCGTCTTTCAACCTCAAGGAGCGCTACGCGGCCTGGATG
ATATATACCTACTCGGGCCTCTTCTGTGCTCACTGTCAACCCCTACAAGTGGCTGCCGGT
TACAATGCCGAGGTGGTGGCCGCTACCGGGCAAGAAGAGGAGTGAGGCCCGCCCCAC
ATCTTCTCCATCTCCGACAACGCCTATCAGTACATGCTGACAGATCGGGAGAACCAGTCC
ATCCTCATCACGGGAGAAATCCGGGGCGGGGAAGACTGTGAACACCAAGCGTGTCCAG
TACTTTGCCAGCATTGCAGCCATAGGTGACCGTGGCAAGAAGGACAATGCCAATGCGAAC
AAGGGCACCTGGAGGACCAGATCATCCAGGCCAACCCCGCTCTGGAGGCCTTCGGCAAT
GCCAAGACTGTCCGGAACGACAACCTCCTCCGCTTTGGGAAATTCATTAGGATCCACTTT
GGGGCCACTGGAAAGCTGGCTTCTGCAGACATAGAGACCTACCTGCTGGAGAAGTCCCGG
GTGATCTTCCAGCTGAAAGCTGAGAGAACTACCACATCTTCTACCAGATTCTGTCCAAC
AAGAAGCCGGAGTTGCTGGACATGCTGCTGGTCAACCAACATCCCTACGACTACGCTTC
GTGTCTCAGGGAGAGGTGTCCTGGCCTCCATTGATGACTCCGAGGAGCTCATGGCCACC
GATAGTGCCTTTGACGTGCTGGCTTCACTTCAGAGGAGAAAGCTGGCGTCTACAAGCTG
ACGGGAGCCATCATGCACTACGGGAACATGAAGTTCAAGCAGAAGCAGCGGGAGGAGCAG
GCGGAGCCAGACGGCACCGAAGATGCTGACAAGTCCGGCTACCTCATGGGGCTGAACTCA
GCTGACCTGCTCAAGGGCTGTGCCACCCTCGGGTAAAGTGGGCAACGAGTATGTCAAC
AAGGGGCAGAGCGTGCAGCAGGTGTAATACTCCATCGGGCTCTGGCCAAGGCAGTGTAT
GAGAAGATGTTCAACTGGATGGTACGCGCATCAACGCCACCCTGGAGACCAAGCAGCCA
CGCCAGTACTTATAGGAGTCTGGACATCGCTGGCTTCGAGATCTTCGACTTCAACAGC
TTTGAGCAGCTTGCATCAACTTACCAACGAGAAGCTGCAGCAGTCTTCAACCACCAC
ATGTTCTGCTGGAGCAGGAGGAGTACAAGAAGGAGGGCATTGAGTGGACATTCATTGAC



[View online »](#)

TTTGGCATGGACCTGCAGGCCTGCATTGACCTCATCGAGAAGCCCATGGGCATCATGTCC
 ATCCTGGAGGAGGAGTGCATGTTCCCAAGGCCACTGACATGACCTTCAAGGCCAAGCTG
 TACGACAACCACCTGGGCAAGTCCAACAATTTCCAGAAGCCACGCAACATCAAGGGGAAG
 CAGGAAGCCCCTTCTCCTGATCCACTACGCCGGCACTGTGGACTACAACATCCTGGGC
 TGGCTGGAAAAAACAAGGATCCTCTCAACGAGACTGTTGTGGCCCTGTACCAGAAGTCC
 TCCCTCAAGCTCATGGCCACTCTTCTCCTCTACGCAACTGCCGATACTGGGGACAGT
 GGTAAAAAGCAAAGGAGGCAAGAAAAAGGGCTCATCTTCCAGACGGTGTCCGGCTCCAC
 CGGGAAAATCTCAACAAGCTAATGACCAACCTGAGGACCACCCATCCTCACTTTGTGCGT
 TGCATCATCCCCAATGAGCGGAAGGCTCCAGGGGTGATGGACAACCCCTGGTCATGCAC
 CAGCTGCGCTGCAATGGCGTGCTGGAGGGCATCCGCATCTGCAGGAAGGGCTTCCCCAAC
 CGCATCCTCTACGGGGACTTCCGGCAGAGGTATCGCATCCTGAACCCAGTGGCCATCCCT
 GAGGGACAGTTTATTGATAGCAGGAAGGGGACAGAGAAGCTGCTCAGCTCTCTGGACATT
 GATCACAACCAGTACAAGTTTGGCCACACCAAGGTGTTCTTCAAGGCAGGGCTGTTGGG
 CTGCTGGAGGAGATGCGGGATGAGAGGCTGAGCCGCATCATCACGCGCATGCAGGCCAA
 GCCCGGGGCCAGCTCATGCGCATTGAGTTCAAGAAGATAGTGGAACGCAGGGATGCCCTG
 CTGGTAATCCAGTGGAACATTCCGGCCTTTCATGGGGGTCAAGAATTGGCCCTGGATGAAG
 CTCTACTTCAAGATCAAGCCGCTGCTGAAGAGCGCAGAGACGGAGAAGGAGATGGCCACC
 ATGAAGGAAGAGTTCCGGGCGCATCAAAGAGACGCTGGAGAAGTCCGAGGCTCGCCGCAAG
 GAGCTGGAGGAGAAGATGGTGTCCCTGCTGCAGGAGAAGAATGACCTGCAGCTCCAAGTG
 CAGGCGGAACAAGACAACCTCAATGATGCTGAGGAGCGCTGCGACCAGCTGATCAAAAAC
 AAGATTCAGCTGGAGGCCAAAGTAAAGGAGATGAATGAGAGGCTGGAGGATGAGGAGGAG
 ATGAACCGGAGCTCACTGCCAAGAAGCGCAAGCTGGAAGACGAGTGTCTCAGAGCTCAAG
 AAGGACATTTGATGACCTGGAGCTGACACTGGCCAAGGTGGAGAAGGAGAAGCATGCAACA
 GAGAACAAGGTGAAGAACCTAACAGAGGAGATGGCTGGGCTGGATGAAATCATCGTAAAG
 CTGACCAAGGAGAAGAAAGCTCTACAAGAGGCCATCAGCAGGCCCTGGATGACCTTCAG
 GTTGAGGAAGACAAGGTCAACAGCCTGTCCAAGTCTAAGGTCAAGCTGGAGCAGCAGGTG
 GATGATCTGGAGGGATCCCTAGAGCAAGAGAAGAAGGTGCGCATGGACCTGGAGCGAGCA
 AAGCGGAAACTGGAGGGCGACCTGAAGCTGACCCAGGAGAGCATCATGGACCTGGAAAAT
 GATAAACTGCAGCTGGAAGAAAAGCTTAAAGAAGAGGAGTTTGACATTAATCAGCAGAAC
 AGTAAGATTGAGGATGAGCAGGYGCTGGCCCTTCAACTACAGAAGAACTGAAGGAAAAC
 CAGGCACGCATCGAGGAGCTGGAGGAGGAGCTGGAGGCCGAGCGCACCGCCAGGGCTAAG
 GTGGAGAAGCTGCGCTCAGACCTGTCTCGGAGCTGGAGGAGATCAGCGAGCGGCTGGAA
 GAGGCCGGCGGGGCCACGTCCGTGCAGATCGAGATGAACAAGAAGCGCGAGGCCGAGTTC
 CAGAAGATGCGGCGGGACCTGGAGGAGGCCACGCTGCAGCACGAGGCCACTGCCGCGGCC
 CTGCGCAAGAAGCACGCCGACAGCGTGGCCGAGCTGGGCGAGCAGATCGACAACCTGCAG
 CGGGTGAAGCAGAAGCTGGAGAAGGAGAAGAGCGAGTTCAAGCTGGAGCTGGATGACGTC
 ACCTCCAACATGGAGCAGATCATCAAGGCCAAGGCAAACTGGAGAAAGTGTCTCGGACG
 CTGGAGGACCAGGCCAATGAGTACCGGTGAAGCTAGAAGAGGCCCAACGCTCCCTCAAT
 GATTTCAACACCCAGCGAGCCAAGCTGCAGACCGAGAATGGAGAGTTGGCCCGCAGCTA
 GAGGAAAAGGAGCGCTAATCTCGCAGCTGACCCGGGGGAAGCTCTTTATACCCAGCAA
 ATGGAGGACCTCAAAAGGCAGCTGGAGGAGGAGGCAAGGCGAAGAACGCCCTGGCCAT
 GCACTGCAGTCGGCCCGCATGACTGCGACCTGCTGCGGGAGCAGTACGAGGAGGAGACA
 GAGGCCAAGGCCGAGCTGCAGCGCTCCTGTCCAAGGCCAACTCGGAGGTGGCCAGTGG
 AGGACCAAGTATGAGACGGACGCCATTACAGCGACTGAGGAGCTCGAAGAGGCCAAAAAG
 AAGCTGGCCAGCGGCTGCAGGATGCCGAGGAGGCCGTGGAGGCTGTTAATGCCAAGTGC
 TCCTCACTGGAGAAGACCAAGCACCGGCTACAGAATGAGATAGAGGACTTGATGGTGGAC
 GTAGAGCGCTCCAATGCTGCTGCTGCAGCCCTGGACAAGAAGCAGAGAACTTTGACAAG
 ATCCTGGCCGAGTGGAAGCAGAAGTATGAGGAGTGCAGTCTGAGCTGGAGTCTCACAG
 AAGGAGGCTCGTCCCTCAGCACAGAGCTTCAAGCTCAAGAACGCCTACGAGGAGTCC
 CTGGAGACCTAGAGACCTTCAAGCGGGAGAACAAGAACCTTCAAGGAGGAAAATCTCGGAC
 CTTACTGAGCAGCTAGGAGAAGGAGGAAAAGAAATGTGCATGAGCTGGAGAAGTCCGCAAA
 CAGCTGGAGGTGGAGAAGCTGGAGCTGCAGTCAGCCCTGGAGGAGGCAGAGGCCCTCCCTG

```
GAGCACGAGGAGGGCAAGATCCTCCGGGCCAGCTAGAGTTCAACCAGATCAAGGCAGAG
ATCGAGCGGAAGCTGGCAGAGAAGGACGAGGAGATGGAACAGGCCAAGCGCAACCACCAG
CGGGTGGTGGACTCGCTGCAGACCTCCCTGGATGCAGAGACACGCAGCCGCAACGAGGTC
CTGAGGGTGAAGAAGAAGATGGAAGGAGACCTCAATGAGATGGAGATCCAGCTCAGCCAC
GCCAACCCGATGGCTGCCGAGGCCAGAAAGCAAGTCAAGAGCCTCCAGAGCTTGTGAAG
GACACCCAGATCCAGCTGGACGATGCGGTCCGTGCCAACGACGACCTGAAGGAGAATC
GCCATCGTGGAGCGCGCAACAACCTGCTGCAGGCTGAGCTGGAGGAGCTGCGTGCCGTG
GTGGAGCAGACAGAGCGGTCCCGGAAGCTGGCGGAGCAGGAGCTATTGAGACCAGCGAG
CGGGTGCAGCTGCTGCATTCCCAGAACACCAGCCTCATCAACCAGAAGAAGAAGATGGAG
TCGGATCTGACCCAGCTCCAGTCGGAAGTGGAGGAGGCAGTGCAGGAGTGCAGAAACGCC
GAGGAGAAGGCCAAGAAGGCCATCAGGATGCCGCCATGATGGCAGAGGAGCTGAAGAAG
GAGCAGGACACCAGCGCCACCTGGAGCGCATGAAGAAGAATGGAGCAGACCTTAAG
GACCTGCAGCACCAGGCTGGACGAGGCCGAGCAGATCGCCCTCAAGGGAGGCAAGAAGCAG
CTGCAGAAGCTGGAAGCGCGGTGCGGGAGCTGGAGGGTGAAGCTGGAGGCCGAGCAGAAG
CGCAACGCAGAGTCGGTGAAGGGCATGAGGAAGAGCGAGCGGCATCAAGGAGCTCACC
TACCAGACAGAGGAAGACAAAAAGAACCTGCTGCGGCTACAGGACCTGGTGGACAAGCTG
CAACTGAAGGTCAAGGCCTACAAGCGCCAGGCCGAGGAGCGGAGGAGCAAGCCAACACC
AACCTGTCCAAGTTCGCAAGGTGCAGCATGAGCTGGATGAGGCAGAGGAGCGGGCGGAC
ATCGCTGAGTCCCAGGTCAACAAGCTTCGAGCCAAGAGCCGTGACATTGGTGCCAAGCAA
AAAATGCACGATGAGGAGTGACACTGCCTCGGGAACCTCACTCTTGCCAACCTGTAATAA
ATATGAGTGCCAACTCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
```

Restriction Sites:

Please inquire

ACCN:

NM_002471

Insert Size:

5900 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 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:

The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

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:	<ol style="list-style-type: none">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:	<u>NM_002471.1</u> , <u>NP_002462.1</u>
RefSeq Size:	5939 bp
RefSeq ORF:	5820 bp
Locus ID:	4624
UniProt ID:	<u>P13533</u>
Cytogenetics:	14q11.2
Protein Pathways:	Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Tight junction, Viral myocarditis
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]