

## Product datasheet for **SC128173**

### myosin heavy chain 9 (MYH9) (NM\_002473) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	myosin heavy chain 9 (MYH9) (NM_002473) Human Untagged Clone
Tag:	Tag Free
Symbol:	myosin heavy chain 9
Synonyms:	BDPLT6; DFNA17; EPSTS; FTNS; MATINS; MHA; NMHC-II-A; NMMHC-IIA; NMMHCA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC128173 sequence for NM_002473 edited (data generated by NextGen Sequencing)

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TAA

Clone variation with respect to NM\_002473.4  
3429 t=>g;4059 c=>t;4872 g=>t;4876 a=>g

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002473 unedited  
NTTCATTCACCCGCCGTTGCCGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATAT  
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<b>3' Read Nucleotide Sequence:</b>	>Reverse primer walk for NM_002473 unedited NCGTTCTTAAAAGTGGGNANGAGCTGCTGCGGGTCTGGGNAAGNGAGCTGTGGTGTC TGTCTGTCCATCCATCTCAGGCTGCAGGAGAAGAGGCTTATTCGGCAGGTTTGGCCTCAG CCCCATCCGCTTTGCCATCTACCTCTTCGTCCGAGCCATCCCCGGCGCCTTCCGGGCCA TTCGGCGGGCACGACAAACGGCAGGTCCCCGGCCTGAGCTTGTCTTTAGGGAGCTGA CTTCCGCGTTTCATGGCATCGCCGTCTCAGTGGCGTCTCCAGCTCGCGCTGCAGTTTCC GCGGGAGGCGTTGGCCCGCTGGCCCTCTCTTCGGCCTCTCCAGCTGCCGCTTGAGCT GCTTCAGGCGGGTAGATGCCTTGTCCGGCCTGGTCTTGTACTGCTCGGCGTTCTCCGCT CGTCATCCACCTGCAGCAGCACATCCTTCACTTCTTCGGTCCGACGACCTGTTTGC AGGCTGCCTGGCCTCCTTGGTCTCGTTGTCCAGCTGCTCCTCCAGCTGTGCAATCTTGG CCTCGAGGGCGGTGATGGAGGCTTGTACTTGGACTTGACAGTGCCTCCATCTCCTGCA GCTTGACCTTAAGCTCCTTGTTCGGCTTCCAGCTGCTGCCGAGCATTCTGTTCTTCT GGGCGTGGCTGCGCTCCAGGTTCCAGGTCGGTGTGATCTGGTTCGATCTGCAGGTTGGCT TCTTCAGCCGGTCTGATCAGCTCCGTGTTGCCCTGCTNCCTCTNCAGCTCCTNCTNCA GCTGGGCGATGCGGGCTNCAGACGCCGCTTCTCTAACGCCAGGGGCTCTTGGCCG TGCTGTGNGCATCTCGTCAGCCAGCTCATCCCGCTCTGCTGGGCTGGCGCT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002473
<b>Insert Size:</b>	10000 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_002473.3</a> , <a href="#">NP_002464.1</a>
<b>RefSeq Size:</b>	7474 bp
<b>RefSeq ORF:</b>	5883 bp
<b>Locus ID:</b>	4627
<b>UniProt ID:</b>	<a href="#">P35579</a>
<b>Cytogenetics:</b>	22q12.3
<b>Domains:</b>	IQ, myosin_head, Myosin_tail, M, Myosin_N, Pox_A_type_inc
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Regulation of actin cytoskeleton, Tight junction, Viral myocarditis

**Gene Summary:**

This gene encodes a conventional non-muscle myosin; this protein should not be confused with the unconventional myosin-9a or 9b (MYO9A or MYO9B). The encoded protein is a myosin IIA heavy chain that contains an IQ domain and a myosin head-like domain which is involved in several important functions, including cytokinesis, cell motility and maintenance of cell shape. Defects in this gene have been associated with non-syndromic sensorineural deafness autosomal dominant type 17, Epstein syndrome, Alport syndrome with macrothrombocytopenia, Sebastian syndrome, Fechtner syndrome and macrothrombocytopenia with progressive sensorineural deafness. [provided by RefSeq, Dec 2011]