

Product datasheet for SC309794

MYH10 (NM_005964) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYH10 (NM_005964) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYH10
Synonyms:	NMMHC-IIB; NMMHCB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309794 representing NM_005964. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
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ATGGCGCAGAGAAGTGGACTCGAGGATCCAGAGAGGTATCTCTTTGTGGACAGGGCTGTCATCTACAAC
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AACTTCATCGATTTCCGGCTGGATCTGCAGCCATGCATCGACCTAATAGAGAGACCTGCGAACCTCCT
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Restriction Sites:

SgfI-RsrII

ACCN:

NM_005964

Insert Size:

5931 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:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_005964.3](#)
RefSeq Size:

7685 bp

RefSeq ORF:	5931 bp
Locus ID:	4628
UniProt ID:	P35580
Cytogenetics:	17p13.1
Protein Families:	Druggable Genome
Protein Pathways:	Regulation of actin cytoskeleton, Tight junction, Viral myocarditis
MW:	229 kDa

Gene Summary: This gene encodes a member of the myosin superfamily. The protein represents a conventional non-muscle myosin; it should not be confused with the unconventional myosin-10 (MYO10). Myosins are actin-dependent motor proteins with diverse functions including regulation of cytokinesis, cell motility, and cell polarity. Mutations in this gene have been associated with May-Hegglin anomaly and developmental defects in brain and heart. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]

Transcript Variant: This variant (2) lacks an alternate in-frame exon in both the 5' and central coding regions, compared to variant 1. The encoded isoform (2) is shorter than isoform 1.