

Product datasheet for RC218258

MYH10 (NM_005964) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYH10 (NM_005964) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYH10
Synonyms:	NMMHC-IIB; NMMHCB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218258 representing NM_005964 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

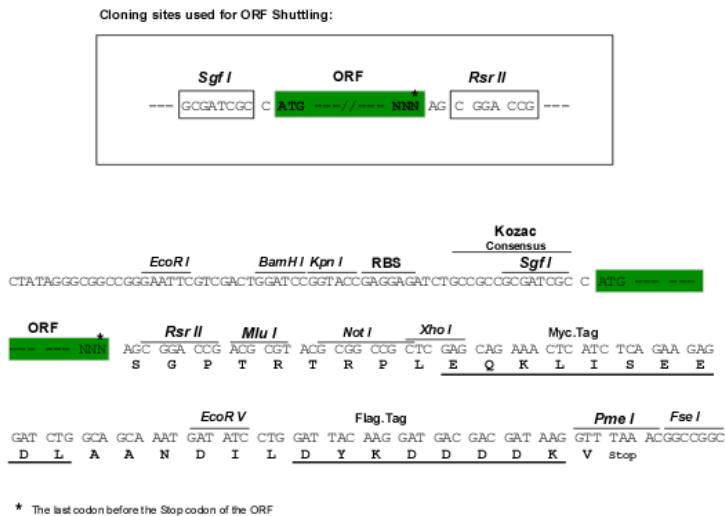
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 Red=Cloning site Green=Tags(s)

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SGP TRTRRLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-RsrII

Cloning Scheme:


ACCN: NM_005964

ORF Size: 5928 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 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_005964.3](#), [NP_005955.3](#)

RefSeq Size: 7619 bp

RefSeq ORF: 5931 bp

Locus ID: 4628

UniProt ID: [P35580](#)

Cytogenetics: 17p13.1

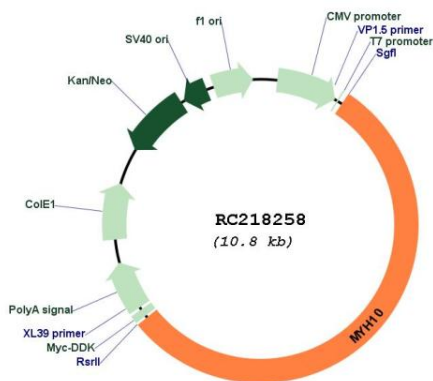
Protein Families: Druggable Genome

Protein Pathways: Regulation of actin cytoskeleton, Tight junction, Viral myocarditis

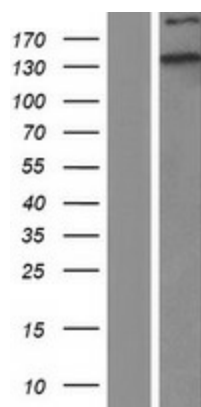
MW: 228.8 kDa

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]

Product images:



Circular map for RC218258



Western blot validation of overexpression lysate (Cat# [LY416950]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218258 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).