

Product datasheet for **RC209252**

MYO1A (NM_005379) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYO1A (NM_005379) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYO1A
Synonyms:	BBMI; DFNA48; MIHC; MYHL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209252 representing NM_005379 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGCTCTCTGGAAGGTTCTGTGGGGTGGAGGATCTTGCTCCTGGAACCTTGGTGGAGGAGTCAC
TGCTCAAGAATCTTCAGCTTCGCTATGAAAACAAGGAGATTTATACCTACATTGGGAATGTGGTATCTC
AGTGAATCCCTATCAACAGCTTCCCATCTATGGCCAGAGTTCATTGCCAAATATCAAGACTATACTTTC
TATGAGCTGAAGCCCATATCTACGCATTGGCAAATGTGGCGTACCAGTCACTGAGGGACAGGGACCGAG
ACCAAGTGTATCCTCATCACAGGCGAGAGTGGATCAGGGAAGACTGAGGCCAGCAAGCTGGTGATGTCTTA
TGTGGCTGCCGTCTGTGGGAAAGGAGAGCAGGTGAACCTGTGAAAGGAGCAGCTGTACAGTCTAACCCA
GTGCTGGAGGCTTTTGGCAATGCCAAGACCATTGCAACAACAATTCTCCCGATTGGAAAATACATGG
ATATTGAATTTGACTTCAAGGGATCCCCCTCGGTGGTGTATCACAACATATCTGCTTGAGAAATCCCG
ATTAGTGAAGCAGCTCAAAGGAGAAAGGAATTCACATCTTCTATCAGCTGCTGGCTGGAGCAGATGAA
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CAGCGTCAGTATGACCACACCATGGGCCTCAGCTGCTCCGCATCTGCCACTATGCGGGCAAGGTGACAT
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Protein Sequence:

>RC209252 representing NM_005379

Red=Cloning site Green=Tags(s)

MPLLEGSVGVEDLVLEPLVEESLLKNLQLRYENKEIYTYIGNVVISVNPYQQLPIYGPEFIAKYQDYTF
 YELKPHIYALANVAYQSLRDRDRDQCILITGESGSKTEASKLVMSYVAAVCGKGEQVNSVKEQLQSNP
 VLEAFGNAKTIRNNSSRFKGYMDIEFDKGSPLGGVITNYLLEKSRLVKQLKGERNFHIFYQLLAGADE
 QLLKALKLERDITGYAYLNHEVSRVDGMDASSFRAVQSAMAVIGFSEEEIRQVLEVTSMVLKLGVLVA
 DEFQASGIPASGIRDGRGVREIGEMVGLNSEEVERALCSRTMETAKEKVVTALNVMQAQYARDALAKNIY
 SRLFDWIVNRINESIKVGIGEKKKVMGVLDIYGFIEIDNSFEQFVINYCNEKLQQVFIENTLKEEQEY
 KREGIPWTKVDYFDNGIICKLIEHNQRGILAMLEECRLPGVVSDFLAKLNQLFSKHGHYESKVTQNA
 QRQYDHTMGLSCFRICHYAGKVTYNVTSFIDKNNDLLFRDLLQAMWKAQHPLLRSLFPEGNPKQASLKR
 PTAGAQFKSSVAILMKNLYSKSPNYIRCIKPNEHQQRGQFSSDLVATQARYLGLLENVRVRRAGYAHRRQ
 YGPFLERYRLSRSTWPHWNGDREGVEKVLGELSMSSGELAFGKTKIFIRSPKTLFYLEEQRRLRLQQL
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 AALTADFIIKSMVQKFLGLKNNLPSTNVLDKTPAAPYKCLSTANQELQQLFYQWKCKRFRDQLSPKQ
 VEILREKLCASELFKGGKASYPQSVPIPCGDYIGLQGNPKLQKLKGEEGPVLMAEAVKKVNRNGKTS
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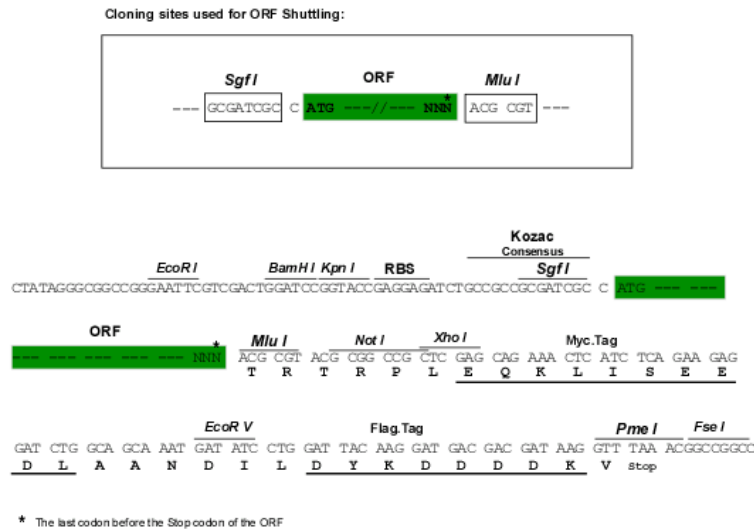
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3193_h09.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_005379

ORF Size: 3129 bp

OTI Disclaimer: 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005379.4](#)

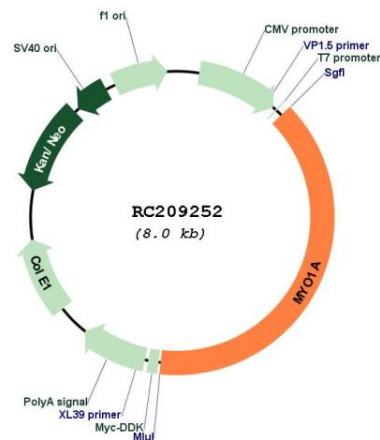
RefSeq Size: 3624 bp

RefSeq ORF: 3132 bp

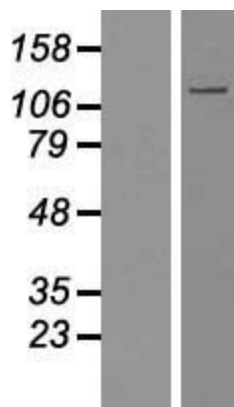
Locus ID: 4640
UniProt ID: [Q9UBC5](#)
Cytogenetics: 12q13.3
MW: 118.2 kDa

Gene Summary: This gene encodes a member of the myosin superfamily. The protein represents an unconventional myosin; it should not be confused with the conventional skeletal muscle myosin-1 (MYH1). Unconventional myosins contain the basic domains characteristic of conventional myosins and are further distinguished from class members by their tail domains. They function as actin-based molecular motors. Mutations in this gene have been associated with autosomal dominant deafness. Alternatively spliced variants have been found for this gene. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RC209252



Western blot validation of overexpression lysate (Cat# [LY417335]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209252 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).