

Product datasheet for RC222422

MYO1D (NM_015194) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYO1D (NM_015194) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYO1D
Synonyms:	myr4; PPP1R108
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222422 representing NM_015194 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGGAGCAGGAGAGCCTGGAATTCGGCAAGGCAGACTTCGTGCTGATGGACACCGTCTCCATGCCCG
 AGTTCATGGCCAACCTCAGGCTCAGATTGAAAAAGGCGCATCTATACGTTTCATTGGAGAAGTCGTCGT
 TTCTGTGAACCTTACAAGTTGTTGAACATCTATGGAAGAGACACAATTGAGCAGTATAAAGGCCGTGAG
 CTGTATGAGAGACCGCCTCACCTTTTGTCTATTGCGGATGCTGCTTACAAGGCTATGAAGAGGCGATCAA
 AAGACACTTGTATTGTGATATCAGGGGAAAGTGGAGCTGGTAAACGGAAGCCAGTAAGTACATTATGCA
 GTATATTGCGGCCATCACCAACCCAGTCAGAGAGCAGAGGTTGAAAGAGTGAAGAATATGTTGCTTAAG
 TCCAACGTGTTTTGGAAGCTTTTGAAATGCCAAAACCAACCGTAATGACAACCTCAAGCAGGTTTGGA
 AATACATGGATATCAACTTTGACTTCAAGGGTGACCTATTGGTGGGCATATCAATACTACTTACTAGA
 AAAGTCTCGAGTGATTGTGCAACAGCCAGGAGAAAGAAGCTTTCATTCTTCTATCAGCTACTCCAAGGA
 GGTTCAGAACAAATGCTACGCTCTCTACATCTCCAGAAATCCCTTTCATCCTACAACATATTCATGTGG
 GAGCTCAATTAAGTCTTCTATCAATGATGCTGCCGAATTCAGAGTTGTTGCTGATGCCATGAAAGTCAT
 TGGCTTCAAACCTGAGGAGATCCAAACAGTGTATAAGATTTTGGCTGCTATTCTGCACTTGGGAAATTTA
 AAATTTGTAGTAGATGGTGACACGCCTCTATTGAGAATGGCAAAGTAGTATCTATCATAGCAGAATTGC
 TCTCTACTAAGACAGATATGGTTGAGAAAAGCCCTTCTTTACCGGACTGTGGCCACAGGCCGTGACATCAT
 TGACAAGCAGCACACAGAACAAGAGGCCAGCTACGGCAGAGACGCCTTTGCCAAGCAATATATGAGCGC
 CTTTTTGTGGATCGTTACTCGCATCAATGATATTATTGAGGTCAAGAACTATGACACCACAATCCATG
 GGAAAAACACTGTTATTGGTGTCTTGGATATCTATGGCTTTGAAATCTTCGACAACAACAGTTTGAACA
 ATTCTGTATCAATTACTGCAATGAGAACTGCAGCAGCTATTTATTGAGCTGGTTCTGAAGCAAGAACAA
 GAGGAATACCAGCGGAAGGGATCCCCTGGAAACATATTGACTACTTCAACAATCAGATCATTGTTGACC
 TCGTGGAGCAACAGCACAAAGGGATCATTGCAATCCTTGATGATGCTTGCATGAATGTCGGCAAAGTCAC
 CGATGAAATGTTCTTGAAGCACTTAACAGTAAATTGGGCAAACACGCCCATTTTCCAGCCGAAAGCTC


[View online »](#)

TGTGCCTCAGACAAAATTCTGGAGTTTGATCGAGATTTTCGAATTCGACATTATGCAGGCGATGTAGTCT
 ATTCTGTCAATTGGTTTTATTGACAAAAATAAGATACTTTATTTCAAGATTTCAAGCGCCTTATGTATAA
 CAGTTCAAATCCTGTGCTCAAGAATATGTGGCCTGAAGGCAAACCTGAGCATTACAGAGGTGACCAAGCGA
 CCTCTGACTGCTGCTACCTTGTTAAGAATTCTATGATTGCTCTAGTAGACAACCTTGCATCAAAGGAAC
 CATATTACGTTTCGTTGCATCAAAACCAATGACAAGAAATCTCCACAGATATTTGATGATGAACGCTGCCG
 GCACCAAGTAGAATATCTTGGACTACTGGAAAAATGTGAGAGTGCCTCGGGCAGGATTTGCCTTCGCCAG
 ACATACGAGAAGTTTCTTACAGGTATAAGATGATCTCTGAATTCACCTGGCCCAACCATGACCTTCCTT
 CAGACAAAGAGGCTGTCAAGAACTAATTGAACGGTGTGGTTTTAGGATGATGTAGCTTATGGGAAGAC
 CAAAATTTTCATTGAACACCCCGAACATTGTTTACCTTGAAGAAGTCCGTGCCAGATGCTCATAAGG
 ATTGTCCTCTTTCTACAAAAGGTGTGGCGGGGCACCCTGGCCCGCATGCGGTACAAAAGAACCAAGGCAG
 CTCTGACAATAATCAGGTACTACCGGCGCTACAAAGTGAAGTCGTACATCCACGAGGTGGCCAGACGCTT
 CCATGGCGTCAAGACCATGCGAGACTACGGGAAGCACGTGAAGTGGCCAAGCCCTCTAAAGTTCTTCGC
 CGTTTTGAGGAGGCCCTGCAGACGATTTTCAATAGATGGAGAGCATCCAGCTCATCAAGAGCATTCCGG
 CCTCAGACCTGCCCCAGGTGAGGCAAAGGTTGCAGCCGTGGAATGTTGAAGGGTCAAAGGGCTGACCT
 CGGGCTCCAGAGGCTGGGAGGGCAACTATCTTGCTTCAAAGCCAGATACACCTCAGACCTCAGGCACT
 TTTGTCCCTGTTGCTAATGAATTGAAACGGAAGGACAAATACATGAATGCCTCTTTTCCTGTCAGTCC
 GTAAGGTAATCGATTTAGTAAGGTGGAAGACAGAGCAATTTTGTCACTGACCGTCACCTGTATAAAT
 GGATCCCACTAACAGTACAAGGTGATGAAGACTATCCCTCTATACAATTTGACTGGTCTGAGTGTCTCC
 AATGGAAGGACCAACTTGTAGTGTCCATACGAAAGACAACAAAGACCTCATTGTCTGCCTCTTCAGCA
 AACAGCCAACCATGAGAGTCAATTTGGAGAAGTGTGGAGTGTGGTGAATCATTTCAGAGTGAGAA
 GCGCCACCTTCAAGTGAACGTACCAACCCAGTACAGTGCAGCCTGCACGGGAAGAAGTGACCCGTCTCC
 GTGGAGACGCGGCTCAACCAGCCCCAGCCGACTTCACCAAGAATCGCTCGGGCTTCATCTCAGCGTGC
 CCGGGAAC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222422 representing NM_015194
 Red=Cloning site Green=Tags(s)

MAEQESLEFGKADFVLMDTVSMPEFMANLRLFEKGRITYTFIGEVVSVNPYKLLNIYGRDTIEQYKGRE
 L YERPPHFLFAIADAAYKAMKRRSKDTCIVISGESGAGKTEASKYIMQYIAAITNPSQRAEVERVKNMLLK
 SNCVLEAFGNAKTNRNDNSSRFKGYMDINDFKGDPIGGHINNYLLEKSRVIVQQPERSFSFYQLLQG
 GSEQMLRSLHLQKSLSSNYIHVGAQLKSSINDAAEFRVADAMKVIKPEEIQT VYKILAAIHLGNL
 KFVVDGDTPLIENGKVVSIIEALLSTKTDMEKALL YRTVATGRDIIDKQHTEQEASYGRDAFAKAIYER
 LFCWIVTRINDIIEVKNYDTTIHGKNTVIGVLDIYGFEIFDNNSEFQFCINYCNEKLQQLFIQLVLKQEQ
 EEYQREGIPWKHIDYFNNQIIIVDLVEQQHKGI IAILDDACMNVGKVTDEMFLALNSKLKHAHFSRKL
 CASDKILEFDRDFRIRHYAGDVVSVIGFIDKNKDTLFDQFKRLMYNSSNPVLKNMWPEGKLSITEVTKR
 PLTAATL FKNMIALVDNLASKEPYVRCIKPNDKKSPQIFDDERCRHQVEYLGLLENVRRRAGFAFRQ
 TYEKF LHYKMISEFTWPNHDLPSDKEAVKKLIERCGFQDDVAYGKTKIFIRTPRTLFTLEELRAQMLIR
 I VLF LQKVWRGTLARMRYKRTKAALTII RYRRYKVKSYIHEVARRFHGVKTMRDYGHVHWPSPPKVL R
 RFEEALQTI FNRWRASQLIKSIPASDLPQVRKVA AVEMLKGQRADLGLQRAWEGNYLASKPDTPQTS GT
 FVPVANELKRKDKYMNVLFSCHVRKVNRF SKVEDRAIFVTDRLH YKMDPTKQYKVMKTIPLYNLTGLSVS
 NGKDQLVVFHTKDNKDLIVCLFSKQPTHE SRIGELVGVLVNHFKSEKRHLQVNVNTPVQCSLHGKCTVS
 VETRLNQPPDFTKNRS GFILSVPGN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8102_g05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_015194

ORF Size: 3018 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.

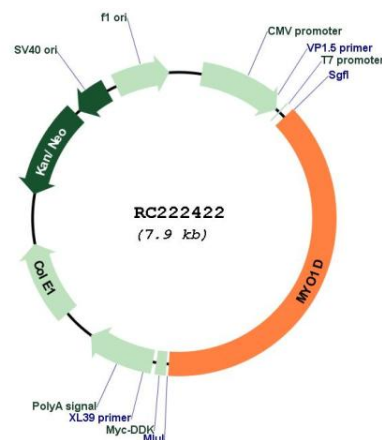
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.

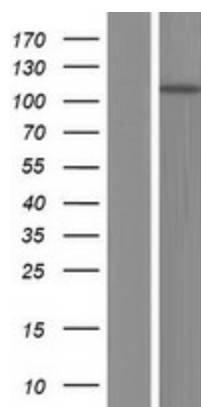
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_015194.1, NP_056009.1</u>
RefSeq Size:	5182 bp
RefSeq ORF:	3021 bp
Locus ID:	4642
UniProt ID:	<u>O94832</u>
Cytogenetics:	17q11.2
MW:	116.2 kDa
Gene Summary:	Unconventional myosin that functions as actin-based motor protein with ATPase activity (By similarity). Plays a role in endosomal protein trafficking, and especially in the transfer of cargo proteins from early to recycling endosomes (By similarity). Required for normal planar cell polarity in ciliated tracheal cells, for normal rotational polarity of cilia, and for coordinated, unidirectional ciliary movement in the trachea. Required for normal, polarized cilia organization in brain ependymal epithelial cells (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC222422



Western blot validation of overexpression lysate (Cat# [LY414717]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222422 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).