

## Product datasheet for **RG222422**

### MYO1D (NM\_015194) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MYO1D (NM\_015194) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** MYO1D  
**Synonyms:** myr4; PPP1R108  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG222422 representing NM\_015194  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGAGCAGGAGAGCCTGGAATTCGGCAAGGCAGACTTCGTGCTGATGGACACCGTCTCCATGCCCC  
AGTTCATGGCCAACCTCAGGCTCAGATTTGAAAAAGGGCGCATCTACGTTTCATTGGAGAAGTCGTCGT  
TTCTGTGAACCCTTACAAGTTGTTGAACATCTATGGAAGAGACACAATTGAGCAGTATAAAGGCCGTGAG  
CTGTATGAGAGACCGCCTCACCTTTTTGCTATTGCGGATGCTGCTTACAAGGCTATGAAGAGCGCATCAA  
AAGACACTTGTATTGTGATATCAGGGGAAAGTGGAGCTGGTAAAACGGAAGCCAGTAAGTACATTATGCA  
GTATATTGCGGCCATACCAACCCAGTCAGAGAGCAGAGGTTGAAAGAGTGAAGAATATGTTGCTTAAG  
TCCAACCTGTGTTTTGGAAGCTTTTGAAATGCCAAAACCAACCGTAATGACAACCTCAAGCAGTTTTGGAA  
AATACATGGATATCAACTTTGACTTCAAGGGTGACCCATTGTTGGGCATATCAATAACTACTTACTAGA  
AAAGTCTCGAGTGATTGTGCAACAGCCAGGAGAAAAGAAGCTTTCATTCTTCTATCAGCTACTCCAAGGA  
GGTTCAGAACAAATGCTACGCTCTACATCTCCAGAAATCCCTTTCATCCTACAACATATTCATGTGG  
GAGCTCAATTAAGTCTTCTATCAATGATGCTGCCGAATTCAGAGTTGTTGCTGATGCCATGAAAGTCAT  
TGGCTTCAAACCTGAGGAGATCCAAACAGTGTATAAGATTTTGGCTGCTATTCTGCACTTGGGAAATTTA  
AAATTTGTAGTAGATGGTGACACGCCTCTATTGAGAATGGCAAAGTAGTATCTATCAGCAGAAATTC  
TCTCTACTAAGACAGATATGGTTGAGAAAAGCCCTTCTTTACCGACTGTGGCCACAGGCCGTGACATCAT  
TGACAAGCAGCACACAGAACAAGAGGCCAGCTACGGCAGAGACGCCTTTGCCAAGCAATATATGAGCGC  
CTTTTTTGTGGATCGTTACTCGCATCAATGATATTATTGAGGTCAAGAACTATGACACCACAATCCATG  
GGAAAAACACTGTTATTGGTGTCTTGGATATCTATGGCTTTGAAATCTTCGACAACAACAGTTTTGAACA  
ATTCTGTATCAATTAAGTCAATGAGAACTGCAGCAGCTATTTATTGAGTGGTTCTGAAGCAAGAACA  
GAGGAATACCAGCGGGAAGGGATCCCCTGAAACATATTGACTACTTCAACAATCAGATCATTGTTGACC  
TCGTGGAGCAACAGCACAAAGGGATCATTGCAATCCTTGATGATGCTTGCATGAATGTCGGCAAAGTCAC  
CGATGAAATGTTCTTGAAGCACTTAACAGTAAATTTGGGCAAACACGCCCATTTTTCCAGCCGAAAGCTC



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TGTGCCTCAGACAAAATTCTGGAGTTTGTATCGAGATTTTCGAATTCGACATTATGCAGGCGATGTAGTCT  
 ATTCTGTCATTGGTTTTATTGACAAAAATAAGATACTTTATTTCAAGATTTCAAGCGCCTTATGTATAA  
 CAGTTCAAATCCTGTGCTCAAGAATATGTGGCCTGAAGGCAAACCTGAGCATTACAGAGGTGACCAAGCGA  
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 CATATTACGTTTCGTTGCATCAAACCAATGACAAGAAATCTCCACAGATATTTGATGATGAACGCTGCCG  
 GCACCAAGTAGAATATCTGGACTACTGGAAAAATGTGAGAGTGCCTCGGGCAGGATTTGCCTTCCGCCAG  
 ACATACGAGAAGTTTCTCACAGGTATAAGATGATCTCTGAATTCACCTGGCCCAACCATGACCTTCCTT  
 CAGACAAAAGAGGCTGTCAAGAACTAATTGAACGGTGTGGTTTTTCAAGGATGATGTAGCTTATGGGAAGAC  
 CAAAATTTTCATTGCAACACCCCGAACATTGTTTACCTTGAAGAAGTCCGTGCCAGATGCTCATAAGG  
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 TTTGTCCTGTTGCTAATGAATTGAAACGGAAGGACAAAATACATGAATGCCTCTTTTCTGTCAGTCC  
 GTAAGGTAATCGATTTAGTAAGGTGGAAGACAGAGCAATTTTGTCACTGACCGTCACCTGTATAAAAT  
 GGATCCCCTAAACAGTACAAGGTGATGAAGACTATCCCTCTATACAATTTGACTGGTCTGAGTGTCTCC  
 AATGGAAGGACCAACTTGTAGTGTCCATACGAAAGACAACAAAGACCTCATTGTCTGCCTCTTCAGCA  
 AACAGCCAACCCATGAGAGTCAATGGAGAAGTGTGGAGTGTGGTGAATCATTTCAGAGTGAGAA  
 GCGCCACCTTCAAGTGAACGTCAACAACCCAGTACAGTGCAGCCTGCACGGGAAGAAGTGCACCGTCTCC  
 GTGGAGACGGCTCAACCAGCCCCAGCCGACTTCAACAAGAATCGCTCGGGCTTATCCTCAGCGTGC  
 CCGGGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG222422 representing NM\_015194  
 Red=Cloning site Green=Tags(s)

MAEQESLEFGKADFVLMDTVSMPEFMANLRLRFEKGRIYTFIGEVVSVNPNYKLLNIYGRDTIEQYKGRE  
 LYERPPHLFAIADAAYKAMKRRSKDTCIVISGESGAGKTEASKYIMQYIAAITNPSQRAEVERVKNMLLK  
 SNCVLEAFGNAKTNRNDNSSRFKGYMDINDFKGDPIGGHINNYLLEKSRVIVQQPERSFHSFYQLLQG  
 GSEQMLRSLHLKSLSSYNIHVGAQLKSSINDAAEFRVADAMKVIGFKPEEIQTVYKILAAIHLGNL  
 KVVVDGDTPLIENGKVVSIIEALLSTKTDMEKALLYRTVATGRDIIDKQHTEQEASYGRDAFAKAIYER  
 LFCWIVTRINDIEVKNYDTTIHGKNTVIGVLDIYGFEIFDNNSFEQFCINYCNEKLQQLFIQLVLKQEQ  
 EEYQREGIPWKHIDYFNNQIIVDLVEQQHKGIIAILDDACMNVGKVTDEMFLALNSKLGKHAHSSRKL  
 CASDKILEFDRDRFRIRHYAGDVVYSVIGFIDKNKDTLFDQFKRLMYNSSNPVLKNMWPEGKLSITEVTKR  
 PLTAATLFKNSMIALVDNLASKEPYVRCIKPNDKSPQIFDDERCRHQVEYLGLENVRRRAGFAFRQ  
 TYEKFLHRYKMISEFTWPNHDLPSDKEAVKKLIERCGFQDDVAYGKTKIFIRTPRTLFTLEELRAQMLIR  
 IVLFLQKVRGTLARMRYKRTKAALTIIRYRRYKVKSYIHEVARRFHGVKTRDYGKHKVWSPPKVLR  
 RFEEALQTIENRWRASQLIKSIPASDLQVRAKVAAVEMLKGQRADLGLQRAWEGNYLASKPDTPQTS  
 FVPVANELKRKDKYMNVLFSCHVRKVNRFKVEDRAIFVTDRLHLYKMDPTKQYKVMKTIPLYNLGLSVS  
 NGKDQLVVFHTKDNKDLIVCLFSKQPTHESTRIGELVGLVNHFKSEKRHLQVNVNPNVQCSLHGKCTVS  
 VETRLNQPQPDFTKNRSGFILSVPGN

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<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>	<p><a href="#">NM_015194.1</a>, <a href="#">NP_056009.1</a></p>
<b>RefSeq Size:</b>	<p>5182 bp</p>
<b>RefSeq ORF:</b>	<p>3021 bp</p>
<b>Locus ID:</b>	<p>4642</p>
<b>UniProt ID:</b>	<p><a href="#">O94832</a></p>
<b>Cytogenetics:</b>	<p>17q11.2</p>
<b>Gene Summary:</b>	<p>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]</p>