

Product datasheet for **RG218817**

MYO5A (NM_000259) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYO5A (NM_000259) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYO5A
Synonyms:	GS1; MYH12; MYO5; MYR12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218817 representing NM_000259 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCGTCGGAGCTCTACACAAAGTTTCCAGGGTTTGGATACCTGATCCAGAGGAAGTCTGGAAGT
CAGCAGAGCTGCTCAAAGATTATAAGCCAGGAGATAAAGTCTCTGCTTACCTCGAGGAAGGAAAGGA
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GAAAATGACCTCACAGCCCTCAGCTATCTTCATGAGCCTGCTGTGCTCCATAATCTCAGAGTCCGCTTTA
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GATAATCAGCCTTGATTAATCTTATAGAATCAAACCTAGGCATTCTAGATTTACTGGATGAGGAATGCA
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 GCTCAACTTTTGAAGTAAAAAGAAAACAGATGATGATGCAGAAAGCCATTTGTTCTATGTGCAATGCTT
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 TGTGTCGTTTCATTCGACTATACAGATGCGTTTACGAGACAGGAAAGACTCTCCCAGCTGCTCATGGAT
 GCTAAACACATCTTTCCTGTACCTTTCCTTTCAACCCATCTTCCCTCGCACTAGAAACCATCCAGATTC
 CAGCCAGCCTCGGCTGGGCTTTATTTACGGGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218817 representing NM_000259
 Red=Cloning site Green=Tags(s)

MAASELYTKFARVWIPDPEEVWKSSELLKDYKPGDKVLLHLEEGKDLEYHLDPKTKELPHLRNPDILVG
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 AVAEEAYQMARDERNQSIIVSGESGAGKTVSAKYAMRYFATVSGSASEANVEEKVLTSPNIMESIGNAK
 TTRNDNSSRFGKYIEIGFDKRYRIIGANMRTYLLEKSRVVFQAEERNYHIFYQLCASAKLPEFKMLRLG
 NADNFNYTKQGGSPVIEGVDDAKEMAHRQACTLLGISESHQMGIFRILAGILHLGNVGFSTRDADSCTI
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 TIVLQSYLRGFLARNRYKILRGHKAVIIQKRVRGWLARTHVKRSMHAI IYLQCCFRRMMAKRELKLLKI
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 ESEYIFSSIEAEMEDIPSRTEEPSEKKVPLDMSLFLKQLKRVTELEQEKEQVMQDELDRKEEQVLRSKAKE
 EERPQIRGALEYESLKRQELESENKLLKNELNLRKALSEKSAPEVTAPGAPAYRVLMEQLTSVSEELD
 VRKEEVLILRSQVLSQKEAIQPKDDKNTMTDSTILLEQVQKMKDKGEIAQAYIGLKETNRSSALDYHELN
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 LQHEITRLTNENLDLMEQLEKQDKTVRKLKQKLVFAKKIGELEVGMENISPGQI IDEP IRPVNIPRKE
 KDFQGMLEYKKEDEQKLVKNLILELKPRGAVNLIPGLPAYILFMCVRHADYLNDDQKVRSLTSTINSI
 KKVLLKRGDDFETVSWLSNTCRFLHCLKQYSGEEGFMKHNTSRQNEHCLTNFDLAEYRQVLSDLAIQIY
 QQLVRVLENILQPMIVSGMLEHETIQGVSGVKPTGLRKRRTSSIADEGTYTLDSILRQLNSFHSVMCQHGM
 DPELIKQVVKQMFYIIGAITLNNLLLRKDMCSWSKGMQIRYNVSQLLEEWLRDKNLMNSGAKETLEPLIQA
 AQLLQVKKKTDDEAEIACSMCNALTTAQIVKVLNLYTPVNEFEERVSVSFIRTIQMRLRDRKDSPLLMD
 AKHIFPVTFPFPSSLALETIQIPASLGLGFISRV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

OTI Disclaimer:	<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 custsupport@origene.com 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. More info</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<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>
Reconstitution Method:	<ol style="list-style-type: none">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:	<p>NM_000259.1, NP_000250.1</p>
RefSeq Size:	<p>6401 bp</p>
RefSeq ORF:	<p>5568 bp</p>
Locus ID:	<p>4644</p>
UniProt ID:	<p>Q9Y4I1</p>
Cytogenetics:	<p>15q21.2</p>
Gene Summary:	<p>This gene is one of three myosin V heavy-chain genes, belonging to the myosin gene superfamily. Myosin V is a class of actin-based motor proteins involved in cytoplasmic vesicle transport and anchorage, spindle-pole alignment and mRNA translocation. The protein encoded by this gene is abundant in melanocytes and nerve cells. Mutations in this gene cause Griscelli syndrome type-1 (GS1), Griscelli syndrome type-3 (GS3) and neuroectodermal melanolyosomal disease, or Elejalde disease. Multiple alternatively spliced transcript variants encoding different isoforms have been reported, but the full-length nature of some variants has not been determined. [provided by RefSeq, Dec 2008]</p>