

Product datasheet for **RG213798**

Myosin (MYH2) (NM_001100112) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin (MYH2) (NM_001100112) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYH2
Synonyms:	IBM3; MYH2A; MYHas8; MyHC-2A; MyHC-IIa; MYHSA2; MYPOP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213798 representing NM_001100112 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG213798 representing NM_001100112
 Red=Cloning site Green=Tags(s)

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 AEEQSNTNLAKFRKLQHELEEAERADIAESQVNKL RVKSREVHTKVISEE

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

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:	<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:	<u>NM_001100112.1, NP_001093582.1</u>
RefSeq Size:	6163 bp
RefSeq ORF:	5826 bp
Locus ID:	4620
UniProt ID:	<u>Q9UKX2</u>
Cytogenetics:	17p13.1
Protein Pathways:	Tight junction, Viral myocarditis
Gene Summary:	Myosins are actin-based motor proteins that function in the generation of mechanical force in eukaryotic cells. Muscle myosins are heterohexamers composed of 2 myosin heavy chains and 2 pairs of nonidentical myosin light chains. This gene encodes a member of the class II or conventional myosin heavy chains, and functions in skeletal muscle contraction. This gene is found in a cluster of myosin heavy chain genes on chromosome 17. A mutation in this gene results in inclusion body myopathy-3. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Sep 2009]