

OriGene Technologies, Inc.

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Product datasheet for RR202291L4V

Myl2 (NM_001035252) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles		
Product Name:	Myl2 (NM_001035252) Rat Tagged ORF Clone Lentiviral Particle		
Symbol:	Myl2		
Synonyms:	Mlc-2; MLC-2s/v; Mlc2		
Mammalian Cell Selection:	Puromycin		
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)		
Tag:	mGFP		
ACCN:	NM_001035252		
ORF Size:	498 bp		
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR202291).		
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. <u>More info</u>		
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.		
RefSeq:	<u>NM 001035252.2, NP 001030329.2</u>		
RefSeq Size:	677 bp		
RefSeq ORF:	501 bp		
Locus ID:	363925		
UniProt ID:	<u>P08733</u>		
Cytogenetics:	12q16		



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Gene Summary:Contractile protein that plays a role in heart development and function (By similarity).
Following phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle
contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as
a consequence of the increase in maximum contraction force and calcium sensitivity of
contraction force. These events altogether slow down myosin kinetics and prolong duty cycle
resulting in accumulated myosins being cooperatively recruited to actin binding sites to
sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to
force (PubMed:15331360). During cardiogenesis plays an early role in cardiac contractility by
promoting cardiac myofibril assembly (By similarity).[UniProtKB/Swiss-Prot Function]

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