

Product datasheet for **RR202291L3V**

MyI2 (NM_001035252) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	MyI2 (NM_001035252) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	MyI2
Synonyms:	Mlc-2; MLC-2s/v; Mlc2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
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. 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.
RefSeq:	NM_001035252.2 , NP_001030329.2
RefSeq Size:	677 bp
RefSeq ORF:	501 bp
Locus ID:	363925
UniProt ID:	P08733
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]