

Product datasheet for **RR203228L4V**

Aco1 (NM_017321) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Aco1 (NM_017321) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Aco1
Synonyms:	Acon1; AH; IRP1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_017321
ORF Size:	2667 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR203228).
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_017321.1 , NP_059017.1
RefSeq Size:	3564 bp
RefSeq ORF:	2670 bp
Locus ID:	50655
UniProt ID:	Q63270
Cytogenetics:	5q22



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Gene Summary:

This gene encodes a member of the aconitase/IPM isomerase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Depending on iron levels in the cytosol, the encoded protein can function as either an aconitase enzyme or as an mRNA binding protein. When cellular iron levels are high, the encoded protein functions as an aconitase, an essential enzyme in the TCA cycle that catalyzes the conversion of citrate to isocitrate. When cellular iron levels are low, the encoded protein regulates iron uptake and utilization by binding to iron-responsive elements in the untranslated regions of mRNAs for genes involved in iron metabolism [provided by RefSeq, Jan 2014]