

OriGene Technologies, Inc.

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Product datasheet for MR217895L4V

Actr3 (NM_023735) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Actr3 (NM_023735) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Actr3
Synonyms:	1200003A09Rik; Arp3
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_023735
ORF Size:	1254 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR217895).
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 023735.2, NP 076224.1</u>
RefSeq Size:	2746 bp
RefSeq ORF:	1257 bp
Locus ID:	74117
UniProt ID:	<u>Q99JY9</u>
Cytogenetics:	1 E2.3



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Gene Summary:ATP-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin
polymerization upon stimulation by nucleation-promoting factor (NPF). The Arp2/3 complex
mediates the formation of branched actin networks in the cytoplasm, providing the force for
cell motility. Seems to contact the pointed end of the daughter actin filament. In addition to
its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin
polymerization in the nucleus, thereby regulating gene transcription and repair of damaged
DNA. The Arp2/3 complex promotes homologous recombination (HR) repair in response to
DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-
strand breaks (DSBs). Plays a role in ciliogenesis.[UniProtKB/Swiss-Prot Function]

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