

Product datasheet for **MR224143L4V**

Rock1 (NM_009071) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Rock1 (NM_009071) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Rock1
Synonyms:	1110055K06Rik; Rock-l
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_009071
ORF Size:	4062 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR224143).
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_009071.2 , NP_033097.1
RefSeq Size:	6187 bp
RefSeq ORF:	4065 bp
Locus ID:	19877
UniProt ID:	P70335
Cytogenetics:	18 A1



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Gene Summary:

Protein kinase which is a key regulator of actin cytoskeleton and cell polarity. Involved in regulation of smooth muscle contraction, actin cytoskeleton organization, stress fiber and focal adhesion formation, neurite retraction, cell adhesion and motility via phosphorylation of DAPK3, GFAP, LIMK1, LIMK2, MYL9/MLC2, PFN1 and PPP1R12A. Phosphorylates FHOD1 and acts synergistically with it to promote SRC-dependent non-apoptotic plasma membrane blebbing. Required for centrosome positioning and centrosome-dependent exit from mitosis. Plays a role in terminal erythroid differentiation. Promotes keratinocyte terminal differentiation (By similarity). Phosphorylates JIP3 and regulates the recruitment of JNK to JIP3 upon UVB-induced stress. Acts as a suppressor of inflammatory cell migration by regulating PTEN phosphorylation and stability. Acts as a negative regulator of VEGF-induced angiogenic endothelial cell activation. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. May regulate closure of the eyelids and ventral body wall by inducing the assembly of actomyosin bundles.[UniProtKB/Swiss-Prot Function]