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Product datasheet for RC211547L2V

ROCK1 (NM_005406) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	ROCK1 (NM_005406) Human Tagged ORF Clone Lentiviral Particle
Symbol:	ROCK1
Synonyms:	P160ROCK; ROCK-I
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_005406
ORF Size:	4062 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC211547).
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_005406.2
RefSeq Size:	6650 bp
RefSeq ORF:	4065 bp
Locus ID:	6093
UniProt ID:	Q13464
Cytogenetics:	18q11.1
Domains:	pkinase, HR1, PH
Protein Families:	Druggable Genome, Protein Kinase

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Protein Pathways: Axon guidance, Chemokine signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Pathogenic Escherichia coli infection, Regulation of actin cytoskeleton, TGF-beta signaling pathway, Vascular smooth muscle contraction, Wnt signaling pathway

MW: 158.6 kDa

Gene Summary: This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. A pseudogene, related to this gene, is also located on chromosome 18. [provided by RefSeq, Aug 2015]