

## Product datasheet for **RC214238L4V**

### Caldesmon (CALD1) (NM\_033139) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Caldesmon (CALD1) (NM_033139) Human Tagged ORF Clone Lentiviral Particle
Symbol:	CALD1
Synonyms:	CDM; H-CAD; HCAD; L-CAD; LCAD; NAG22
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_033139
ORF Size:	1674 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC214238).
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. <a href="#">More info</a>
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:	<a href="#">NM_033139.3</a> , <a href="#">NP_149130.1</a>
RefSeq Size:	4282 bp
RefSeq ORF:	1677 bp
Locus ID:	800
UniProt ID:	<a href="#">Q05682</a>
Cytogenetics:	7q33
Domains:	Caldesmon
Protein Pathways:	Vascular smooth muscle contraction



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MW: 64.1 kDa

**Gene Summary:** This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regulation of smooth muscle and nonmuscle contraction. The conserved domain of this protein possesses the binding activities to Ca(2+)-calmodulin, actin, tropomyosin, myosin, and phospholipids. This protein is a potent inhibitor of the actin-tropomyosin activated myosin MgATPase, and serves as a mediating factor for Ca(2+)-dependent inhibition of smooth muscle contraction. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]