

## Product datasheet for RC223989L1

### Caldesmon (CALD1) (NM\_033157) Human Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Caldesmon (CALD1) (NM_033157) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	Caldesmon
Synonyms:	CDM; H-CAD; HCAD; L-CAD; LCAD; NAG22
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC223989).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF.

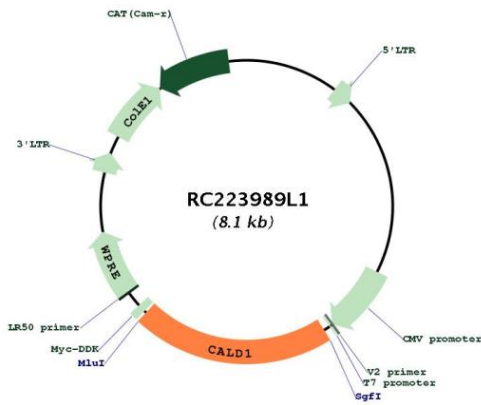
ACCN:	NM_033157
ORF Size:	1692 bp



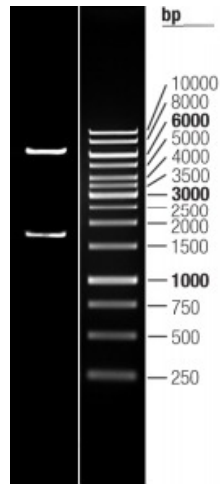
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<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_033157.2</a> , <a href="#">NP_149347.1</a>
<b>RefSeq Size:</b>	4546 bp
<b>RefSeq ORF:</b>	1692 bp
<b>Locus ID:</b>	800
<b>UniProt ID:</b>	<a href="#">Q05682</a>
<b>Cytogenetics:</b>	7q33
<b>Domains:</b>	Caldesmon
<b>Protein Pathways:</b>	Vascular smooth muscle contraction
<b>MW:</b>	65.4 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC223989L1



Double digestion of RC223989L1 using SgfI and MluI