

## Product datasheet for **RC214296**

### Caldesmon (CALD1) (NM\_033140) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Caldesmon (CALD1) (NM_033140) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Caldesmon
Synonyms:	CDM; H-CAD; HCAD; L-CAD; LCAD; NAG22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC214296 representing NM\_033140  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTGGTGGATCCGGATCGCATGGAAGACGCAGCCTGGCCGCGCTCTCCCAAATCGCCTACCAGAGGA  
 ATGACGATGATGAAGAGGAGGCAGCCCGGAACCGCGCCGCCAGCCGACAGGAACGGCTGCGGCAGAA  
 GCAGGAGGAAGAATCCTTGGGACAGGTGACCGACCAGGTGGAGGTGAATGCCAGAACAGTGTGCCTGAC  
 GAGGAGGCCAAGACAACCACCACAAACTCAAGTGAAGGGGATGATGAGGCCGATTCTCGGAGCGCC  
 TGGCTCGGCGTGAGGAAAGACGCCAAAAACGCCTTCAGGAGGCTCTGGAGCGGCAGAAGGAGTTCGACCC  
 AACATAACAGATGCAAGTCTGTCGCTCCCAAGCAGAAGAATGCAAAATGACACAGCAGAAAATGAACT  
 ACCGAGAAGGAAGAAAAAGTGAAGTCGCCAAGAAAGATACGAGATAGAGGAAACAGAAACAGTCACCA  
 AGTCTACCAGAAGAATGATTGGAGGGATGCTGAAGAAAAACAAGAAAGACAAAGGAAAAGGAGGAGGA  
 GGAAGAGGAGAAGCCAAAGCGAGGGAGCATTGGAGAAAATCAGATCAAAGATGAAAAGATTAAGGAGAC  
 AAGAACCCTAAAGAAGAGTTAAGAGCTTCATGGATCGAAAGAAGGGATTACAGAAGTTAAGTCGCAGA  
 ATGGAGAATTCATGACCCACAACTTAAACATACTGAGAATACTTTCAGCCGCCCTGGAGGGAGGGCCAG  
 CGTGGACACCAAGGAGGCTGAGGGCGCCCCCAGGTGGAAGCCGGCAAAAGGCTGGAGGAGCTTCGTCGT  
 CGTCGCGGGGAGACCGAGAGCGAAGAGTTCGAGAAGCTCAAACAGAAGCAGCAGGAGGCGGCTTGGAGC  
 TGGAGGAACTCAAGAAAAAGAGGGAGGAGAGAAGGAAGTCTGGAGGAGGAAGAGCAGAGGAGGAAGCA  
 GGAGGAAGCCGATCGAAAACAGAGAGGAGGAAGAGAAGAGGAGGCTAAAGGAAGAGATTGAAAGGCGA  
 AGAGCAGAAGCTGCTGAGAAACGCCAGAAGATGCCAGAAGATGGCTTGTGAGTGAAGAAGAACATTCA  
 AGTGTTCCTCCTAAAGTTTCATCTCTCAAGATAGAAGAGCGAGCAGAATTTTTGAATAAGTCTGTGCA  
 GAAAAGCAGTGGTGTCAAATCGACCCATCAAGCAGCAATAGTCTCAAGATTGACAGCAGACTGGAGCAG  
 TATACAGTGCAATTGAGGGAACAAAAAGCGCAAAACCTACAAAGCCGGCAGCCTCGGATCTTCTGTTT  
 CTGCTGAAGGTGTACGCAACATCAAGAGTATGTGGGAGAAAGGAATGTGTTTTTCACTCCCCACTGCAGC  
 AGGCACACCAAATAAGGAAACTGCTGGCTTGAAGGTAGGGGTTTCTAGCCGCATCAATGAATGGCTAACT  
 AAAACCCAGATGGAAACAAGTCACCTGCTCCCAAACCTTCTGACTTGAGACCAGGAGACGTATCCAGCA  
 AGCGGAACCTCTGGGAAAAGCAATCTGTGGATAAGGTCACCTCCCCACTAAGGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC214296 representing NM\_033140  
 Red=Cloning site Green=Tags(s)

MLGGSGSHGRRSLAALSQIAYQRNDDDEEEAARERRRRARQERLRQKQEEESLQVTDQVEVNAQNSVDP  
 EEAKTTTTNTQVEGDDEAAFLERLARREERRQKRLQEALERQKEFDPTITDASLSLPSRRMQNDTAENET  
 TEKEEKSESQRERYEIEETETVTKSYQKNDWRDAEENKKEDKEKEEEEEKPKRGSIGENQIKDEKIKKD  
 KEPKEEVKSFMDRKKGFTEVKSQNGEFMTHLKHTEENTFSRPGGRASVDTKEAEGAPQVEAGKRLEELRR  
 RRGETESEEFELKQKQQAALLELEELKKREERRKVLQEEQRRKQEEADRKLREEEEKRRLKEEIERR  
 RAEAAEKRQKMPEDGLSDDKPKFCFTPKGSSLKIEERAFLNKSQKSSGVKSTHQAIVSKIDSRLEQ  
 YTSAIEGTKSAKPTKPAASDLPVPAEGVRNIKSMWEKGNVFSPTAAGTPNKETAGLKVGVSRRINWLT  
 KTPDGNKSPAPKPSDLRPGDVSSKRNLWEKQSVDKVTSPTKV

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8065\\_g10.zip](https://cdn.origene.com/chromatograms/mk8065_g10.zip)

**Restriction Sites:**

Sgfl-MluI



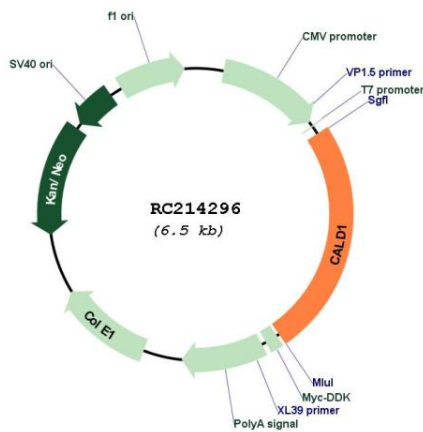
**Domains:** Caldesmon

**Protein Pathways:** Vascular smooth muscle contraction

**MW:** 61 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]

**Product images:**



Circular map for RC214296