

## Product datasheet for **RC205370**

### Calponin (CNN1) (NM\_001299) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calponin (CNN1) (NM_001299) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calponin
Synonyms:	HEL-S-14; Sm-Calp; SMCC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205370 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTCCTCTGCTCACTTCAACCGAGGCCCTGCCTACGGGCTGTCAGCCGAGGTTAAGAACAAGCTGGCCC  
AGAAGTATGACCACCAGCGGGAGCAGGAGCTGAGAGAGTGGATCGAGGGGTGACAGGCCGTCGCATCGG  
CAACAAC TTCATGGACGGCCTCAAAGATGGCATCATTCTTTGCGAATTCATCAATAAGCTGCAGCCAGGC  
TCCGTGAAGAAGATCAATGAGTCAACCCAAAATTGGCACCAGCTGGAGAACATCGGCAATTCATCAAGG  
CCATCACCAAGTATGGGGTGAAGCCCCAGCACATTTTTGAGGCCAACGACCTGTTTGAGAACACCAACCA  
TACACAGGTGCAGTCCACCCTCCTGGCTTTGGCCAGCATGGCGAAGACGAAAGGAAACAAGTGAACGTG  
GGAGTGAAGTACGCAGAGAAGCAGGAGCGGAAATTCGAGCCGGGGAAGCTAAGAGAAGGGCGGAACATCA  
TTGGGCTGCAGATGGGCACCAACAAGTTTGCCAGCCAGCAGGGCATGACGGCCTATGGCACCCGGCGCCA  
CCTCTACGACCCCAAGCTGGGCACAGACCAGCCTCTGGACCAGGGCACCATCAGCCTGCAGATGGGCACC  
AACAAAGGAGCCAGCCAGGCTGGCATGACTGCGCCAGGGACCAAGCGGCAGATCTTCGAGCCGGGCTGG  
GCATGGAGCACTGCGACACGCTCAATGTCAGCCTGCAGATGGGCAGCAACAAGGGCGCCTCGCAGCGGG  
CATGACGGTGTATGGGCTGCCACGCCAGGTCTACGACCCCAAGTACTGTCTGACTCCCGAGTACCCAGAG  
CTGGGTGAGCCCGCCACAACCACCGCACACAACACTACTACAATTCCGCC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC205370 protein sequence  
Red=Cloning site Green=Tags(s)

MSSAHFNRPAYGLSAEVKNKLAQKYDHRQELREWIEGVTGRRIGNNFMDGLKDGIIICEFINKLQPG  
 SVKKINESTQNWHLNIGNFIKAITKYGVKPHDIFEANDLFENTNHTQVQSTLLALASMAKTGKNKVV  
 GVKYAEKQERKFEPGKLREGRNIIGLQMGTKNFASQQGMTAYGTRRHL YDPKLGTDQPLDQATISLQMG  
 NKGASQAGMTAPGTRQIFEPGLGMEHCDLNLVSLQMGSNKGASQRGMTVYGLPRQVYDPKYCLTPEYPE  
 LGEPAHNHHAHNYNSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6027\\_f12.zip](https://cdn.origene.com/chromatograms/mk6027_f12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001299

**ORF Size:** 891 bp

**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.

**Components:** 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_001299.6](#)

**RefSeq Size:** 1599 bp

**RefSeq ORF:** 894 bp

**Locus ID:** 1264

**UniProt ID:** [P51911](#)

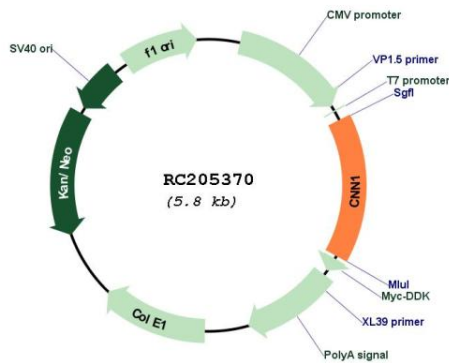
**Cytogenetics:** 19p13.2

**Domains:** calponin, CH

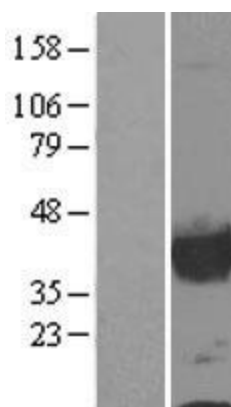
**MW:** 33.2 kDa

**Gene Summary:** Thin filament-associated protein that is implicated in the regulation and modulation of smooth muscle contraction. It is capable of binding to actin, calmodulin, troponin C and tropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity [By similarity].[UniProtKB/Swiss-Prot Function]

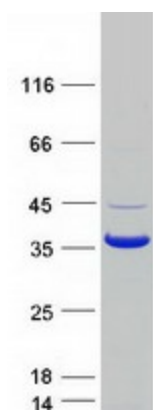
### Product images:



Circular map for RC205370



Western blot validation of overexpression lysate (Cat# [LY400519]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205370 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CNN1 protein (Cat# [TP305370]). The protein was produced from HEK293T cells transfected with CNN1 cDNA clone (Cat# RC205370) using MegaTran 2.0 (Cat# [TT210002]).