

Product datasheet for **RG205370**

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:	TurboGFP
Symbol:	Calponin
Synonyms:	HEL-S-14; Sm-Calp; SMCC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205370 representing NM_001299 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTCTGCTCACTTCAACCGAGGCCCTGCCTACGGGCTGTCAGCCGAGGTTAAGAACAAGCTGGCCC
AGAAGTATGACCACCAGCGGGAGCAGGAGCTGAGAGAGTGGATCGAGGGGTGACAGGCCGTCGCATCGG
CAACAACCTCATGGACGGCCTCAAAGATGGCATCATTCTTTGCGAATTCATCAATAAGCTGCAGCCAGGC
TCCGTGAAGAAGATCAATGAGTCAACCCAAAATTGGCACCAGCTGGAGAACATCGGCAACTTCATCAAGG
CCATCACCAAGTATGGGGTGAAGCCCCAGACATTTTTGAGGCCAACGACCTGTTTGAGAACACCAACCA
TACACAGGTGACGTCACCCCTCCTGGCTTTGGCCAGCATGGCGAAGACGAAAGGAAACAAGTGAACGTG
GGAGTGAAGTACGCAGAGAAGCAGGAGCGGAAATTCGAGCCGGGGAAGCTAAGAGAAGGGCGGAACATCA
TTGGGCTGCAGATGGGCACCAACAAGTTTGCCAGCCAGCAGGGCATGACGGCCTATGGCACCCGGCGCCA
CCTCTACGACCCCAAGCTGGGCACAGACCAGCCTCTGGACCAGGGCACCATCAGCCTGCAGATGGGCACC
AACAAAGGAGCCAGCCAGGCTGGCATGACTGCGCCAGGGACCAAGCGGCAGATCTTCGAGCCGGGCTGG
GCATGGAGCACTGCGACACGCTCAATGTCAGCCTGCAGATGGGCAGCAACAAGGGCGCCTCGCAGCGGGG
CATGACGGTGTATGGGCTGCCACGCCAGGTCTACGACCCCAAGTACTGTCTGACTCCCGAGTACCCAGAG
CTGGGTGAGCCCGCCACAACCACCGCACACAACACTACTACAATTCCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205370 representing NM_001299
 Red=Cloning site Green=Tags(s)

MSSAHFNRPAYGLSAEVKNKLAQKYDHQREQLREWIEGVTGRRIGNNFMDGLKDGIIILCEFINKLQPG
 SVKKINESTQNWHLLENIGNFIKAITKYGVKPHDIFEANDLFENTNHTQVQSTLLALASMAKTGKNKVVN
 GVKYAEKQERKFEPGKLREGRNIIGLQMGTKNFASQQGMTAYGTRRHL YDPKLGTDQPLDQATISLQMG
 NKGASQAGMTAPGTRQIFEPGLGMEHCDTLNLSLQMGSNKGASQRGMTVYGLPRQVYDPKYCLTPEYPE
 LGEPAHNHHAHNYNSA

TRTRPLE - GFP Tag - V

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

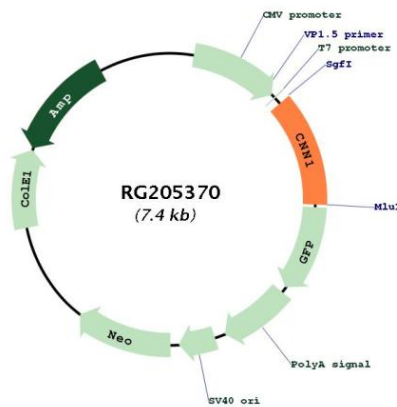
UniProt ID: [P51911](#)

Cytogenetics: 19p13.2

Domains: calponin, CH

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 RG205370