

## Product datasheet for RC229976

### CCM2 (NM\_001167934) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CCM2 (NM\_001167934) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** CCM2  
**Synonyms:** C7orf22; OSM; PP10187  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC229976 representing NM\_001167934  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAAGAGGAGGGCAAGAAGGGCAAGAAGTATTTAGGTCAGTTAACGTCCATACCAGGATACCTGAATC  
 CCTCCAGTAGGACTGAAATCCTGCATTTTCATAGACAATGCAAAGAGAGCCACCAGCTTCCGGGACACTT  
 GACTCAGGAGCACGATGCTGTGCTCAGCCTGTCTGCGTACAACGTCAAGCTGGCCTGGAGGGACGGGGAG  
 GATATCATCCTCAGGGTCCCATCCATGACATCGCCGCCGTCTCCTATGTTCCGGGATGACGCTGCACACC  
 TGGTGGTCTGAAGACAGCCAGGACCCAGGGATCTCCCCAGCCAGAGTCTGTGTGCGGAAAGTCCAG  
 AGGCCTCAGTGCAGGCTCCCTGTGCGGAGAGTGCAGTTGGGCCCGTGGAGGCATGCTGCCTGGTATCCTG  
 GCTGCAGAGAGCAAGGTCGCTGCGGAGGAGCTTTGCTGTCTGCTAGGCCAGGTCTTCCAGTTGTTTACA  
 CGGAGTCCACCATCGACTTTCTGGACAGAGCGATATTTGATGGGGCCTCTACCCCGACCCACCACCTGTC  
 CCTGCACAGCGATGACTCTTCTACAAAAGTGGACATTAAGGAGACCTACGAGGTGGAAGCCAGCACTTTC  
 TGCTTCCCTGAATCTGTGGATGTGGTGGTGCATACCCACAGCAAGACCATCAGTGAGAGCGAGCTGA  
 GCGCCAGCGCCACTGAGCTGTGCGAGACTACATGCTGACGCTGCGCACCAGCTGTGCATCACAGGAGAT  
 CCAGCAGTTTGCAGCACTGCTGCAGGATACCGCAATGGGGCCTCTATCCAGAGTCTGCATCAACCTG  
 CGGCAGCTCTACGGGACAGCCGAAGTTCCTGCTGCTTGGTCTGAGGCCCTTCACTCCGAGAAGGACA  
 GCCAGCACTTCGAGAATTCTGGAGACCATGGCGTGAAGGATGGCCCGGCATCATCACTGACAGCTT  
 TGGCAGGCACCGCGGGCCCTGAGCACCACATCCAGTTCCACCACCAATGGGAACAGGGCCACGGGCAGC  
 TCTGATGACCGGTCCGCACCCTCAGAGGGGGATGAGTGGGACCGCATGATCTCGGACATCAGCAGCGACA  
 TTGAGGCGCTGGGCTGCAGCATGGACCAGGACTCAGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



[View online >](#)

Protein Sequence: >RC229976 representing NM\_001167934  
 Red=Cloning site Green=Tags(s)

MEEEGKKGKKYLQGLTSIPGYLNPSRTEILHFIDNAKRAHQLPGLHTQEHDAVLSLSAYNVKLAWRDGE  
 DIILRVPIHDIAAVSYVRDAAHLVVLKTAQDPGISPSQSLCAESSRGLSAGLSSESAVGPVEACLVIL  
 AAESKVAEEELCCLLGQVFQVYVTESTIDFLDRAIFDGASTPTHHLSLHSDSSTKVVDIKETYEVEASTF  
 CFPESVDVGGASPHSKTISESELSASATELLQDYMLTLRTKLSSQEIQQFAALLHEYRNGASIEHFCINL  
 RQLYGDSRKFLLLGLRPFPEKDSQHFENFLETIGVKDGRGIITDSFGRHRRALSTTSSSTTNGNRRATGS  
 SDDRSAPSEGDEWRMISDISSDIEALGCSMDQDSA

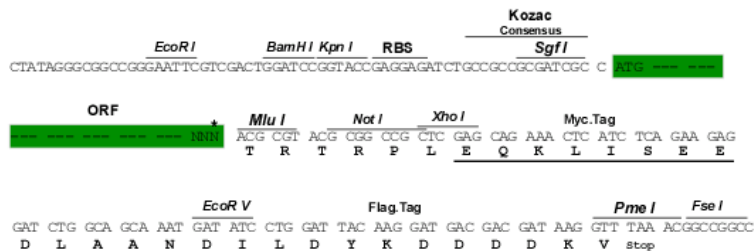
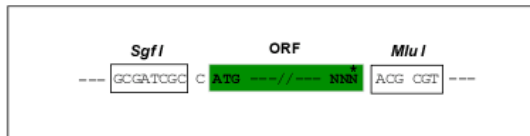
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8056\\_c06.zip](https://cdn.origene.com/chromatograms/mk8056_c06.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

ACCN: NM\_001167934

ORF Size: 1158 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\\_001167934.1](#), [NP\\_001161406.1](#)

**RefSeq ORF:** 1161 bp

**Locus ID:** 83605

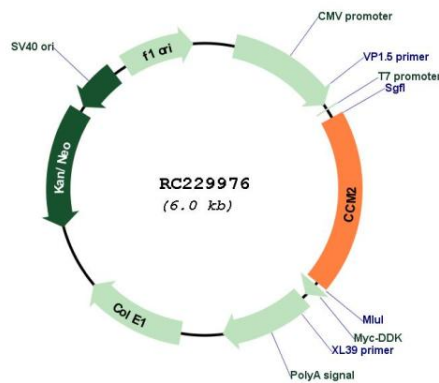
**UniProt ID:** [Q9BSQ5](#)

**Cytogenetics:** 7p13

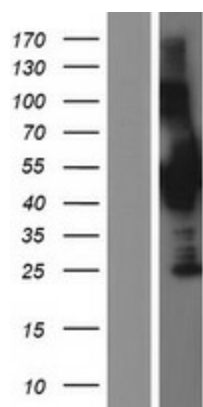
**MW:** 42.5 kDa

**Gene Summary:** This gene encodes a scaffold protein that functions in the stress-activated p38 Mitogen-activated protein kinase (MAPK) signaling cascade. The protein interacts with SMAD specific E3 ubiquitin protein ligase 1 (also known as SMURF1) via a phosphotyrosine binding domain to promote RhoA degradation. The protein is required for normal cytoskeletal structure, cell-cell interactions, and lumen formation in endothelial cells. Mutations in this gene result in cerebral cavernous malformations. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Nov 2009]

### Product images:



Circular map for RC229976



Western blot validation of overexpression lysate (Cat# [LY432976]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229976 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).