

Product datasheet for **RG213838**

CCM2 (NM_001029835) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CCM2 (NM_001029835) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CCM2
Synonyms:	C7orf22; OSM; PP10187
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213838 representing NM_001029835
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCATAGTAGCTGTCGGCAGAGGAGGAACAGAAATCTCTCAAAGAAATTCCTCAAACAGAATTTACACA
 CAGGGTATTCCATGGAGAATGAGCCTGGAATTGTCTCGCATTTAAACGAGTATTCTAAAAGGTGAAAA
 GAGTAGAGATAAGAAAGCCCATGAGAAGGTGACAGAGAGGCGCCCTCTGCACACTGTGGTGTTCATTG
 CCTGAGCGCTCGAGCCAGACAGACTGCTGAGCGACTATATTGAGAAGGAGGTAAAGTATTTAGGTCAGT
 TAACGTCCATACCAGGATACCTGAATCCCTCCAGTAGGACTGAAATCCTGCATTTATAGACAATGCAAA
 GAGAGCCACCAGCTTCCGGGACACTTGACTCAGGAGCACGATGCTGTGCTCAGCCTGTCTGCGTACAAC
 GTCAAGCTGGCCTGGAGGACGGGGAGGATATCATCCTCAGGGTGCCATCCATGACATCGCCGCGCTCT
 CCTATGTTGGGATGACGCTGCACACCTGGTGGTCTGAAGACAGCCAGGACCCAGGGATCTCCCCAG
 CCAGAGTCTGTGTGCGGAAAGTTCCAGAGGCCCTCAGTGCAGGCTCCCTGTGCGAGAGTGCAGTTGGGCC
 GTGGAGGCATGCTGCCTGGTTCATCCTGGCTGCAGAGAGCAAGGTGCTGCGGAGGAGCTTTGCTGTCTGC
 TAGGCCAGGTCTCCAGTTGTTTACACGGAGTCCACCATCGACTTTCTGGACAGAGCGATATTTGATGG
 GGCTCTACCCCGACCCACCACCTGTCCCTGCACAGCGATGACTCTTACAAAAGTGGACATTAAGGAG
 ACCTACGAGGTGGAAGCCAGCACTTTCTGCTTCCCTGAATCTGTGGATGTGGGTGGTGCATACCCCA
 GCAAGACCATCAGTGAGAGCGAGCTGAGCGCCAGCGCCACTGAGCTGTGCGAGACTACATGCTGACGCT
 GCGACCAAGCTGTCATCACAGGAGATCCAGCAGTTTGCAGCACTGCTGCAGGACTACCGCAATGGGGCC
 TCTATCCACGAGTTCTGCATCAACCTGCGGCAGCTCTACGGGGACAGCCGAAGTTCTGCTGCTGGTC
 TGAGGCCCTTCACTCCCTGAGAAGGACAGCCAGCACTTCGAGAACTTCTGGAGACCATTGGCGTGAAGGA
 TGGCCCGGCATCATCACTGACAGCTTTGGCAGGCACCGCGGGCCCTGAGCACACATCCAGTTCCACC
 ACCAATGGGAACAGGGCCACGGGACGCTCTGATGACCGGTGCGCACCTCAGAGGGGATGAGTGGGACC
 GCATGATCTCGGACATCAGCAGCGACATTGAGGCGCTGGGCTGCAGCATGGACCAGGACTCAGCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

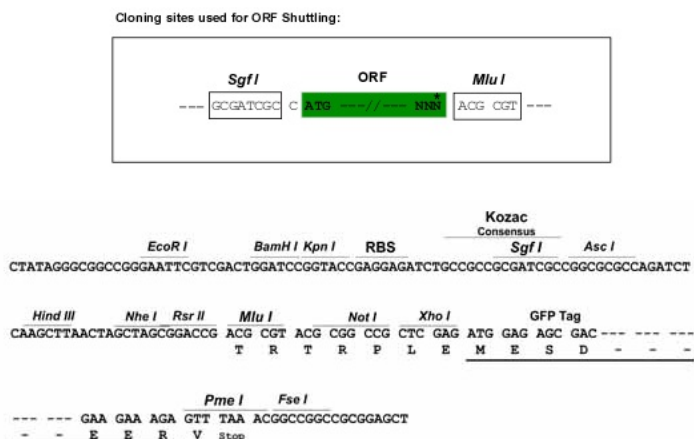
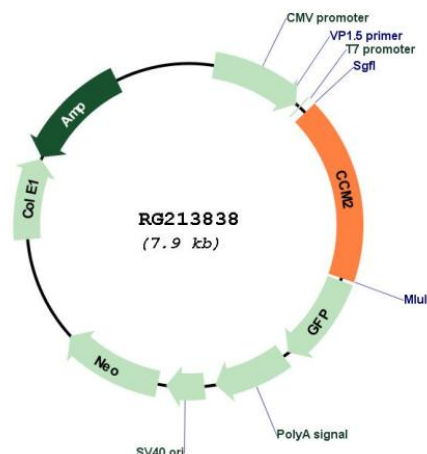
>RG213838 representing NM_001029835
 Red=Cloning site Green=Tags(s)

MHSSCRQRNQLSKEIPQTEFHTGYSMENEPGIVSPFKRVFLKGEKSRDKKAHEKVTERRPLHTVVL
 PERVEPDRLLSDYIEKEVKYLGQLTSIPGYLNPSRTEILHFIDNAKRAHQLPGHLTQEHDVLSL
 SAYN VKLAWRDGEDIIILRVPIHDIAAVSYVRDAAHLVVLKTAQDPGISPSQSLCAESSRGLSAGSL
 SESAVGP VEACCLVILAAESKVAEEELCCLLGQVFQVYTESTIDFLDRAIFDGASTPTHHL
 SLHSDSSTKVDIKE TYEVEASTFCFPESVDVGGASPHSKTISESELASATELLQDYMLTLRKL
 SSQEIQQFAALLHEYRNGA SIHEFCINLRQLYGDSRFLLLGLRPFIPKDSQHFENFLETIGVKDGRGI
 ITDSFGRHRRALSTTSST TNGNRATGSSDDRSAPSEGDEWDRMISDISSDIEALGCSMDQDSA

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001029835

ORF Size: 1395 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:	<ol style="list-style-type: none">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:	<u>NM_001029835.2, NP_001025006.1</u>
RefSeq Size:	2140 bp
RefSeq ORF:	1398 bp
Locus ID:	83605
UniProt ID:	<u>Q9BSQ5</u>
Cytogenetics:	7p13
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]