

## Product datasheet for **RG211979**

### SMOC2 (NM\_022138) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SMOC2 (NM_022138) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMOC2
Synonyms:	bA37D8.1; bA270C4A.1; dJ421D16.1; DTDP1; MST117; MSTP117; MSTP140; SMAP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG211979 representing NM\_022138  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTGCTCCCCAGCTCTGCTGGCTGCCGCTGCTCGCTGGGCTGCTCCCGCGGTGCCGCTCAGAAGT  
 TCTCGGCCTCACGTTTTGAGAGTGGATCAAGATAAAGACAAGGATTGTAGCTTGGACTGTGCGGGTTC  
 GCCCAGAAACCTCTCTGCGCATCTGACGGAAGGACCTTCCTTTCCCGTTGTGAATTTCAACGTGCCAAG  
 TGCAAAGATCCCCAGCTAGAGATTGCATATCGAGGAACTGCAAAGACGTGTCCAGGTGTGTGGCCGAAA  
 GGAAGTATACCCAGGAGCAAGCCCGAAGGAGTTTCAGCAAGTGTTCATTCTGAGTGAATGACGACGG  
 CACCTACAGTCAGGTCCAGTGTACAGCTACACGGGATACTGCTGGTGCCTCACGCCAACGGGAGGCC  
 ATCAGCGGCACTGCCGTGGCCACAAGACGCCCGGTGCCGGTTCCGTAATGAAAAGTTACCCCAAC  
 GCGAAGGCACAGAAAAACAGTCTCCTTGCAAATCTTTCCGTTCTGAATTCAGATGATGCCGACGTCC  
 AGCGTTGGAGACTCAGCCTCAAGGAGATGAAGAAGATATTGCATCACGTTACCCTACCCTTTGGACTGAA  
 CAGGTTAAAAGTCGGCAGAACAAAACCAATAAGAATTCAGTGTATCCTGTGACCAAGAGCACCAGTCTG  
 CCCTGGAGGAAGCAAGCAGCCCAAGAACGACAATGTGGTGTATCCCTGAGTGTGCGCACGGCGGCCCTA  
 CAAGCCAGTGCAGTGCCACCCCTCCACGGGGTACTGCTGGTGCCTCTGGTGGACACGGGGCGCCCAT  
 CCCGGCACATCCACAAGTACGAGCAGCCGAAATGTGACAACACGGCCAGGGCCACCCAGCCAAAGCCC  
 GGGACCTGTACAAGGGCCGACGCTACAAGTTGTCCGGGTGCCAAAAGCATGAGTTTCTGACCAGCGT  
 TCTGGACGCGTGTCCACGGACATGGTCCACGCCGCTCCGACCCCTCCTCCTCGTCAGGACGGCTCTCA  
 GAACCCGACCCAGCCATACCTAGAGGAGCGGGTGGTGCCTGACTTCAAACACTGGATAAAAAA  
 CCAGCGGAGACATCGGCAAAAAGGAAATCAAACCCTCAAGAGGTTCTTCGCAAAAAATCAAAGCCCAA  
 AAAATGTGTGAAGAAGTTTGTGAATACTGTGAGGTGAATAATGACAAATCCATCTCCGTACAAGAAGT  
 ATGGGCTGCCTGGCGTGGCGAAAGAGGACGGCAAAGCGGACACCAAGAAACGCCACACCCCCAGAGGTC  
 ATGCTGAAAGTACGTCTAATAGACAGCCAAGGAAACAAGGA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG211979 representing NM\_022138  
 Red=Cloning site Green=Tags(s)

MLLPQLCWLPLLAGLLPPVPAQKFSAL TFLRVDQDKDKDCSLDCAGSPQKPLCASDGRFTLSRCEFQRAK  
 CKDPQLEIAYRGNCKDVSRCVAERKYTQEQRKEFQQVFIPECNDDGTYSQVQCHSYTGYCWCVTPNGRP  
 ISGTAVAHKTPRCPGSVNEKLPQREGTGKTVSLQIFSVLNSDDAAAPALETQPQGEEDIASRYPTLWTE  
 QVKSQRNKTNKNVSSCDQEHQSAL EEAQPKNDNVVIPECAHGGLYKPVQCHPSTGYCWCVLVDTGRPI  
 PGTSTRYEQPKCDNTARAHPAKARDLYKGRQLQGCPGAKKHEFLTSVLDALSTDMVHAASDPSSSSGRLS  
 EPDPSHTLEERVVHWFKLLDKNSSGDI GKKEIKPFKRLRKKSKPKCVKFFVEYCDVNNDKSI SVQEL  
 MGCLGVAKEDGKADTKRHTPRGHAESTSNRQPRKQG

**TR**TRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_022138

**ORF Size:** 1371 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\\_022138.1](#), [NP\\_071421.1](#)

**RefSeq Size:** 2947 bp

**RefSeq ORF:** 1374 bp

**Locus ID:** 64094

**UniProt ID:** [Q9H3U7](#)

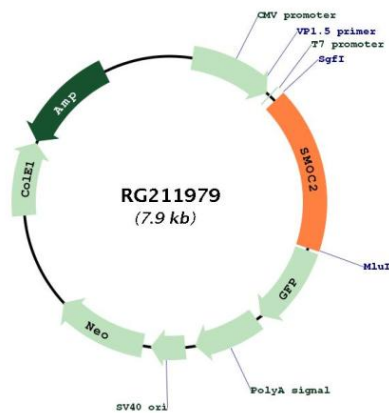
**Cytogenetics:** 6q27

**Domains:** thyroglobulin\_1, EFh, kazal

**Protein Families:** Secreted Protein

**Gene Summary:** This gene encodes a member of the SPARC family (secreted protein acidic and rich in cysteine/osteonectin/BM-40), which are highly expressed during embryogenesis and wound healing. The gene product is a matricellular protein which promotes matrix assembly and can stimulate endothelial cell proliferation and migration, as well as angiogenic activity. Associated with pulmonary function, this secretory gene product contains a Kazal domain, two thyroglobulin type-1 domains, and two EF-hand calcium-binding domains. The encoded protein may serve as a target for controlling angiogenesis in tumor growth and myocardial ischemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]

**Product images:**



Circular map for RG211979