

Specifications:

Gene:	<i>hSMOC2</i>
Accession:	NP_001159884.1
Insert size:	1354bp
Concentration:	10µg at 0.2µg/µL

hSMOC-2 cDNA Plasmid

**SMOC2 SPARC related modular
calcium binding 2 [*Homo sapiens*
(human)]**

Also known as: DTDP1; SMAP2;
MST117; MSTP117; MSTP140;
bA37D8.1; bA270C4A.1; dJ421D16.1

Summary:

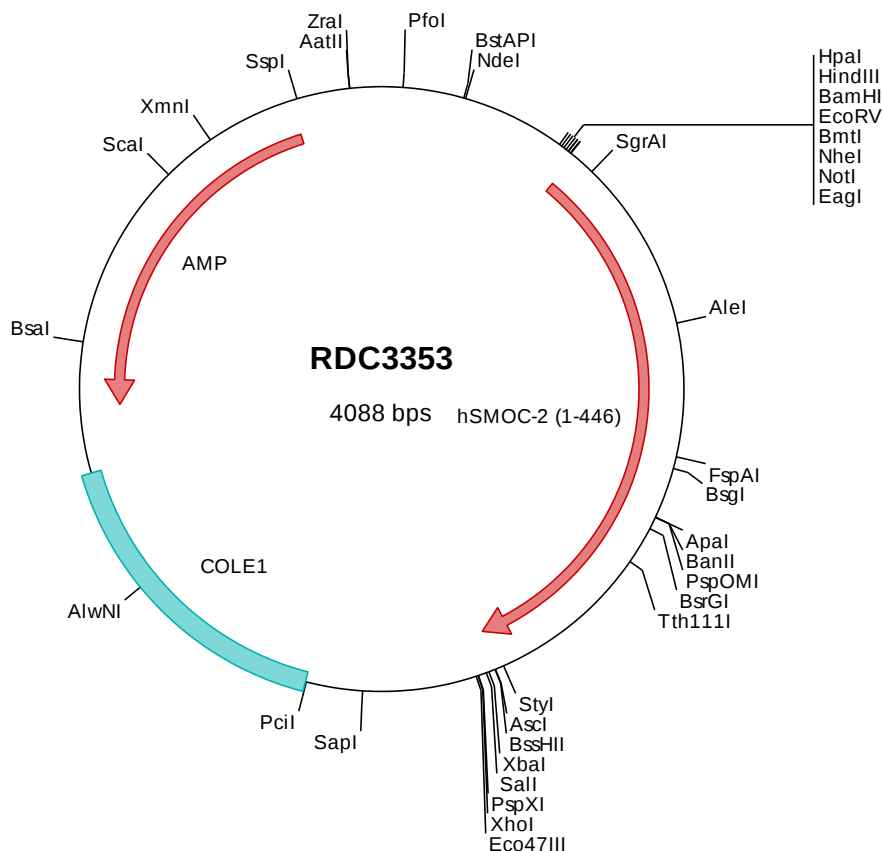
SMOC-2 is a member of the SPARC family (secreted protein acidic and rich in cysteine/osteonectin/BM-40), which are highly expressed during embryogenesis and wound healing. It is a matricellular protein which promotes matrix assembly and can stimulate endothelial cell proliferation and migration, as well as angiogenic activity. Associated with pulmonary function, SMOC-2 contains a Kazal domain, two thymoglobulin type-1 domains, and two EF-hand calcium-binding domains. It may serve as a target for controlling angiogenesis in tumor growth and myocardial ischemia. Alternatively spliced transcripts encoding different proteins have been described.

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC3353 Plasmid DNA Sequence

```

1   tcgcgcgcttt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaagg ggaatgtctg caaggcgatt aagttgggta acgccagggt tttcccgatc acgacgttgt aaaacgacgg ccagtgaatt
401  ggagacgtgt taacaagctt ggaaccgata tcgctagcgc ggccgcgaacc atgctgctcc cccagctctg ctggctgcgg ctgctcgtg ggctgctccc
501  gccggtgccc gctcagaagt tctcggcgct cagctttttg agagtggatc aagataaaga caaggattgt agcttggact gtgcgggttc gccccagaaa
601  cctctctgcg catctgacgg aaggaccttc ctttcccggt gtgaatttca acgtgcgaag tgcaaatgc cccagctaga gattgcatat cgaggaacct
701  gcaaaagcgt gtccaggtgt gtggcggaaa ggaagtatac ccaggagcaa gcccggaagg agtttcagca agtgttcatt cctgagtgcg atgacgacgg
801  cacctacagt caggtccagt gtacacagta caccggatag tgcgtgtgct tcaocgcccac cgggaggccc atcagcgcca ctgcccgtgc ccacaagacg
901  ccccggtgcc cgggttcctg aatgaaaag ttaccccac gcgaaggcac agggaaaaca gatgatgcg cagctccagc gttggagact cagcctcaag
1001 gagatgaaga agatattgca tcacgttacc ctaccctttg gactgaacag gttaaaagtc gccagaacaa aaccaataag aattcagttg catcctgtga
1101 ccaagagcac cagtctgccc tggaggaaac caagcagccc aagaacgaca atgtgtgtat ccctgagttg gcgcacggcg gccctotaca gccagtgcag
1201 tgccacccct ccacggggta ttgctgtgtg tgcctgtgtg acacggggcg cccatttccc ggccatcca caaggtacga gcagcggaaa tgtgacaaca
1301 cggccagctg ccacccagcc aaagccggcg acctgtacaa gggcgccagc ctacaaaggtt gtccgggtgc caaaaagcat gactttctga ccagcgttct
1401 ggacgcgctg tccacggaca ttgtccacgc cgcctccgac cccctcctct cgtcaggcag gctctcagaa cccgacccca gccataccct agaggagcgg
1501 gtggtgcact ggtacttcaa actactggat aaaaactcca gtggagacat cggcaaaaag gaaatcaaac ccttcaagag gttccttgcg aaaaaatcaa
1601 agcccaaaaa atgtgtgaag aagtttgttg aatactgtga cgtgaataat gacaaaatcca tctccgtaca agaactgatg ggtcgctgg gcgtggcgaa
1701 agaggacggc aaagcggaca ccaagaaacg ccacaccccc agaggtcatg ctgaaagtac gtctaataga cagccaagga aacaaggata aaggcgcgcc
1801 agtatactct agagtgcaca cccggggaat tctctgagcg ctgctctcta gcttggcgta atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg
1901 ctcacaattc cacacaacat acgagccgga agcataaagt gtaaaagcctg ggtgtgctaa tgagtgcctt aactcacatt aattgcttg cgctcactgc
2001 ccgctttcca gtcgggaaac ctgtcgtgct agctgcatta atgaatcgcc caacgcgcgg ggagaggcgg tttgcgtatt gggcgctctt ccgcttcttc
2101 gctcaactgac tcgctgcgct cggctgttgc gctgcggcga gcggtatcag ctactcaaaa ggcggttaata cggttatcca cgaactcagg ggataacgca
2201 ggaaagaaca ttgtgagcaaa aagccagcaa aagccagga acgctaaaaa ggcgcgcttg tccataggtc cgcgccccct gacgagcattc
2301 acaaaaaatcg acgctcaagt cagaggtggc gaaacccgac aggaactataa agataccagg cgtttccccc tggaagctcc ctgctgcgct ctctctgttc
2401 gaccctgcgc cttaccggat acctgtccgc ctttctccct tcgggaagcg tcggcctttt tccggttaact atctcagttc atctcagttc ggtgtaggtc
2501 tctcgtctcc agctgggctg ttgtgcacga ccccccgctc agcccgagcg ctgcgcctta tccggttaact atcgtcttga gtccaaacccg gtaagacacg
2601 acttatcgcc actggcagca gccactggta acagattagc cagagcgtag tatgtaggcg gtgtacaga gttcttgaag ttgtggccta actacggcta
2701 cactagaagg acagtatttg gatatcgcc tctgtctgaag ccagttacct cgggaaaaag agttggtagc tcttgatccg gcaaaacaa caccgctggt
2801 agcgggtggt tttttgtttg caagcagcag attacgcgca gaaaaaaagg atctcaagaa gatcctttga tcttttttac ggggtctgac gctcagtgga
2901 acgaaaaatc acgttaaagg attttgttca tgagattatc aaaaaggatc ttacactaga tccttttaaa ttaaaaatga agttttaaat caatctaaag
3001 tatatatgag taaaacttggt ctgacagtta ccaatgctta atcagtgagg cactatctc agcgatctgt ctatttcgtt ctatccatagt tgccctgactc
3101 cccgctgctg agataactac gatacgggag ggcttaccat ctggcccccag tgctgcaatg ataccgcgag acccagctc accggtccca gatttatcag
3201 caataaacca gccagccgga agggccgagc gcagaagtgg tcttgcaact ttatccgctt ccatccagtc tattaattgt tgccgggaag ctgagtagaag
3301 tagttcgcca gttaatagtt tgcgcaacgt tgttgccatt gctacaggca tctgtgtgtc acgctcgtcg tttggtatgg cttcattoag ctccggttcc
3401 caacgatcaa ggcgagttac atgatcccc atgtgtgtgca aaaaagcggt tagctccttc ggtcctccga tcggtgtcag aagtaagttg gccgcagttg
3501 tatcactcat ggttatggca gcaactgcata attctcttac tgtcatgcca tccgtaagat gcttttctgt gactgggtgag tactcaacca agtcattctg
3601 agaatagtgt atcgccgacg cgagttgctc ttgcccggcg tcaataacgcg ataataccgc gccacatagc agaactttaa aagtgctcat cattggaaaa
3701 cgttctctcg ggcgaaaact ctcaaggatc ttaccgctgt tgagatccag ttcatgtaa cccactcgtg caccacactg atcttcagca tcttttactt
3801 tcaccagcgt ttctgggtga gcaaaaacag gaaggcaaaa tgccgcaaaa aaggggataa gggcgacacg gaaatgttga atactcatac tcttctcttt
3901 tcaatattat tgaagcattt atcagggtta ttgtctcatg agcggatata tatttgaatg tatttagaaa aataaacaac taggggttcc gcgcacattt
4001 ccccgaaaag tgccacctga cgtctaagaa accattatta tcatgacatt aacctataaa aataggcgta tcacgaggcc ctttcgtc

```

> RDC3353 Translated Insert Sequence

```

1   mllpqlcwlpl llaqlppvp aqkfsaltfl rvdqdkdkdc sldcagspqk plcasdgrtf lsrcefrak ckdqpleiay rgnckdvsrc vaerkytqeq
101  arkefqgvfi pecnddgtys qvqchsytyg cwcvtpngrp isgtavahkt prcpsvnek lpqregtgkt ddaapalet qpqgdeedia sryptlwteq
201  vksrqnktnk nsvsscdqeh qsaleeakqp kndnvvipec ahgglykpvq chpstgycwc vlvdtrpip gtstryeqpk cdntarahpa kardlykgrq
301  lggcpgakkh efltsvldal stdmvhaas pssssgrlse pdpshtleer vhwfyklll knssgdigkk eikpfkrflr kkskpkckvk kfveycdvnn
401  dksisvqelm gclgvakedg kadtckrhtp rghaestsnr qprkqg

```