

## Product datasheet for RC230096

### SMOC2 (NM\_001166412) Human Tagged ORF Clone

#### Product data:

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                            |
| Product Name:             | SMOC2 (NM_001166412) Human Tagged ORF Clone                                    |
| Tag:                      | Myc-DDK                                                                        |
| Symbol:                   | SMOC2                                                                          |
| Synonyms:                 | bA37D8.1; bA270C4A.1; dJ421D16.1; DTDP1; MST117; MSTP117; MSTP140; SMAP2       |
| Mammalian Cell Selection: | Neomycin                                                                       |
| Vector:                   | pCMV6-Entry (PS100001)                                                         |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                                           |
| ORF Nucleotide Sequence:  | >RC230096 representing NM_001166412.<br>Blue=ORF Red=Cloning site Green=Tag(s) |

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTGCTCCCCAGCTCTGCTGGCTGCCGCTGCTCGCTGGGCTGCTCCCGCCGGTGCCCGCTCAGAAG
TTCTCGGCGCTCACGTTTTTGTAGAGTGGATCAAGATAAAGACAAGGATTGTAGCTTGGACTGTGCGGGT
TCGCCCCAGAAACCTCTCTGCGCATCTGACGGAAGGACCTTCCTTTCCCGTTGTGAATTTCAACGTGCC
AAGTGCAAAGATCCCCAGCTAGAGATTGCATATCGAGGAACTGCAAAGACGTGTCCAGGTGTGTGGCC
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GACGGCACCTACAGTCAGGTCCAGTGTACAGCTACACGGGATACTGCTGGTGCCTCAGCCCCAACGGG
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CCCCAACGCGAAGGCACAGGAAAAACAGATGATGCCGCAGCTCCAGCGTTGGAGACTCAGCCTCAAGGA
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TCCACGGGGTACTGCTGGTGCCTCCTGGTGGACACGGGGCGCCCCATTCCCGGCACATCCACAAGGTAC
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

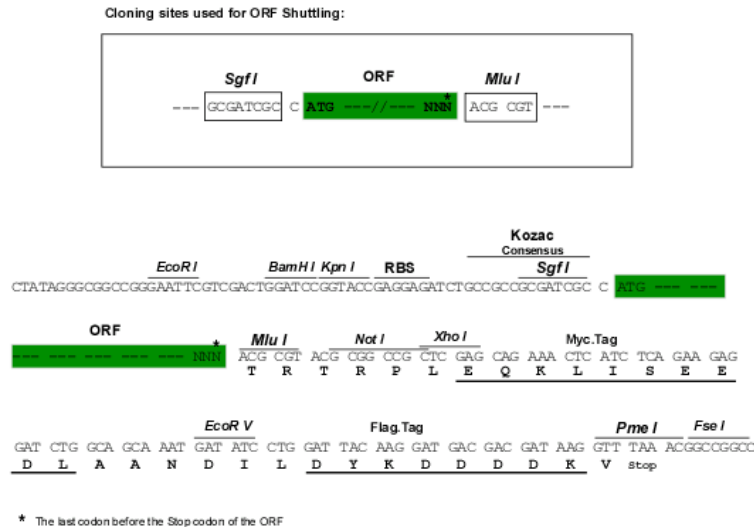

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**Protein Sequence:** >Peptide sequence encoded by RC230096  
 Blue=ORF Red=Cloning site Green=Tag(s)

MLLPQLCWLPLLAGLLPPVPAQKFSALTFLRVDQDKDKDCSLDCAGSPQKPLCASDGRFSLRCEFQRA  
 KCKDPQLEIAYRGNC KDVSRCVAERKYTQE QARKEFQQVF IPECNDDGTYSQVQCHSYTGYCWCVPNG  
 RPI SGTAVAHKTPRCPGSVNEKLPQREGTGKTDAAAPALETQPQGDEEDIASRYPTLWTEQVKSQNK  
 TNKNSVSSCDQEHQSAL EEAKQPKNDNVV IPECAHGGL YKPVQCHPSTGYCWCVL VDTGRPIPGTSTRY  
 EQPKCDNTARAHPAKARDLYKGRQLQGCGPAKKHEFLT SVLDALSTDMVHAASDPSSSSGRLSEPDPSH  
 TLEERVVHWYFKLLDNSSSGDIGKKEIKPFRFLRKSKPKKCVKKFVEYCDVNNDKSISVQELMGCLG  
 VAKEDGKADTKKRHTPRGHAESTSNRQPRKQG  
 TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001166412

**ORF Size:** 1338 bp

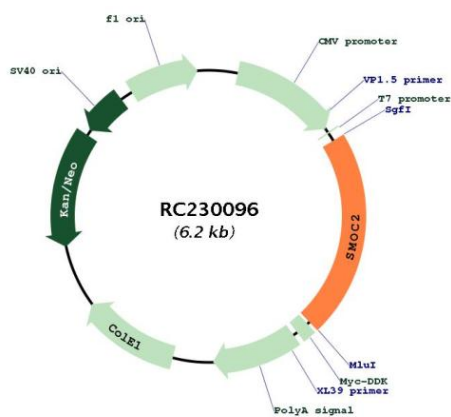
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>                                                                                                                                                                                                                                |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>RefSeq:</b>                | <u>NM_001166412.2</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RefSeq ORF:</b>            | 1341 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Locus ID:</b>              | 64094                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>UniProt ID:</b>            | <u>Q9H3U7</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cytogenetics:</b>          | 6q27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Protein Families:</b>      | Secreted Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>MW:</b>                    | 49.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Gene Summary:</b>          | <p>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 thymoglobulin 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]</p> |

## Product images:



Circular map for RC230096