

## Product datasheet for RR213612

### Smc3 (NM\_031583) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smc3 (NM_031583) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smc3
Synonyms:	bamacan; Cspg6; SMC-3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR213612 representing NM_031583 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTACATCAAGCAGGTGATTATCCAGGGCTCCGAAGTTACCGAGATCAAACAATTGTAGATCCCTTCA  
GTTCAAAACATAATGTTATTGTGGGCAGAAATGGATCTGGAAAAAGCAACTTTTTTATGCAATCCAGTT  
TGTTCTCAGTGATGAATTTAGTCATCTTCGTCCAGAGCAGCGATTGGCTTTGTTGCACGAGGGTACAGGT  
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AGGAAGTTTCGCTTCGAAGAGTTATTGGTGCCAAAAAAGATCAGTATTTCTAGATAAGAAGATGGTCAC  
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ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RR213612 representing NM\_031583  
 Red=Cloning site Green=Tags(s)

MYIKQVIIQGFRSYRDQTI VDPFSSKHNVIVGRNGSGKSNFFYAIQFVLSDEFSHLRPEQRLALLHEGTG  
 PRVISAFVEIIFDNSDNRLPIDKKEEVLRRVIGAKKDQYFLDKKMTKNDVMNLLSAGFSRSNPYYIVK  
 QGKINQMATAPDSQRLKLLREVAGTRVYDERKEESI SLMKETEGKREKINELLKYIEERLHLEEEKEEL  
 AQYQKWKMRRALEYTYIYNQELNETRAKLDLDEL SAKRETSGEKSRQLRDAQDARDKMEDIERQVRELKTK  
 ISAMKEEKEQLSAERQEIQRTKLEL KAKDLQDEL AGNSEQRKRLK KERQKLEKIEEKQKELAEETPK  
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 ESTRESLKAELGTDLLSQLSLEDQKRV DALNDEIRQLQ QENRQLLNERIKLEGIITRVETYL NENLRKRL  
 DQVEQELNELRETEGGTVLTATTSELEA INKRVKDTMARSEDL DNSIDKTEAGIKELQKSMERWKNMEKE  
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 GKATLVMKKGDEGSQSQDEGE GSGESERGSQS SVSPVDQFTGVGIRVSFTGKQGMREMQLSGGQK  
 SLVALALIFAIQKCDPAPFYL FDEIDQALDAQHRKAVSDMIMELAVHAQF ITTTFRPELLESADKFYGVK  
 FRNKVSHIDVITAEMAKDFVEDDTHG

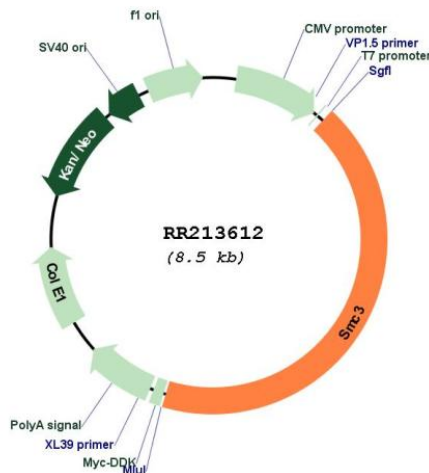
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_031583

**ORF Size:** 3651 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\\_031583.2](#), [NP\\_113771.2](#)

**RefSeq Size:** 4158 bp

**RefSeq ORF:** 3654 bp

**Locus ID:** 29486

**Cytogenetics:** 1q55

**MW:** 141.5 kDa

**Gene Summary:** core protein of a chondroitin sulfate proteoglycan that is a component of basement membranes [RGD, Feb 2006]