

## Product datasheet for **RG208401**

### SMC3 (NM\_005445) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SMC3 (NM_005445) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMC3
Synonyms:	BAM; BMH; CDLS3; CSPG6; HCAP; SMC3L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208401 representing NM_005445 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

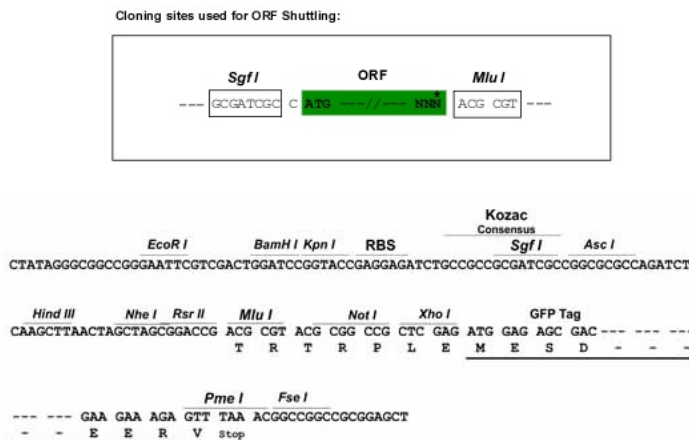
Protein Sequence: >RG208401 representing NM\_005445  
 Red=Cloning site Green=Tags(s)

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 GKATLVMKKGDEGSQSQDEGEGSGESERGSQS SVSPVDQFTGVGIRVSFTGKQGMREMQLSGGQK  
 SLVALALIFAIQKCDPAPFYL FDEIDQALDAQHRKAVSDMIMELAVHAQF ITTTFRPELLESADKFYGVK  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

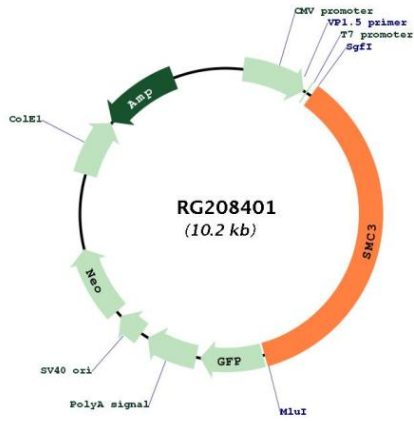


ACCN: NM\_005445

ORF Size: 3651 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_005445.3</a> , <a href="#">NP_005436.1</a>
<b>RefSeq Size:</b>	4131 bp
<b>RefSeq ORF:</b>	3654 bp
<b>Locus ID:</b>	9126
<b>UniProt ID:</b>	<a href="#">Q9UQE7</a>
<b>Cytogenetics:</b>	10q25.2
<b>Domains:</b>	SMC_N, SMC_C
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cell cycle, Oocyte meiosis
<b>Gene Summary:</b>	This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular, nuclear protein or a secreted protein. The nuclear form, known as structural maintenance of chromosomes 3, is a component of the multimeric cohesin complex that holds together sister chromatids during mitosis, enabling proper chromosome segregation. Post-translational modification of the encoded protein by the addition of chondroitin sulfate chains gives rise to the secreted proteoglycan bamacan, an abundant basement membrane protein. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208401