

## Product datasheet for **RG201761**

### Spermidine synthase (SRM) (NM\_003132) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Spermidine synthase (SRM) (NM_003132) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Spermidine synthase
Synonyms:	PAPT; SPDSY; SPS1; SRML1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201761 representing NM_003132 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCCCGCCCCGACGGCCCCGCCCTCCGGCCCCGCCCATCCGCGAGGGCTGGTTCGCGAGA  
CCTGCAGCCTGTGGCCCGCCAGGCCCTGTCGCTGCAGGTGGAGCAGCTGCTCCACCACCGGCGCTCGCG  
CTACCAGGACATCCTCGTCTTCCGAGTAAGACCTATGGCAACGTGCTGGTGGACGGTGTATCCAG  
TGCACGGAGAGACGAGTTCTCCTACCAGGAGATGATCGCCAACCTGCCTCTGCAGCCACCCCAACC  
CGCGAAAGGTGCTGATCATCGGGGCGGAGATGGAGGTGCTCCTGCGGGAGGTGGTGAAGCACCCCTCCGT  
GGAGTCCGTGGTCCAGTGTGAGATCGACGAGGATGTCATCCAAGTCTCCAAGAAGTTCCTGCCAGGCATG  
GCCATTGGCTACTCTAGCTCGAAGCTGACCCTACATGTGGGTGACGGTTTTGAGTTCATGAAACAGAATC  
AGGATGCCTTCGACGTGATCATCACTGACTCCTCAGACCCCATGGGCCCGCCGAAAGTCTCTTCAAGGA  
GTCCTATTACCAGCTCATGAAGACAGCCCTCAAGGAAGATGGTGTCTCTGCTGCCAGGGCGAGTGCCAG  
TGGCTGCACCTGGACCTCATCAAGGAGATGCGGCAGTTCTGCCAGTCCCTGTTCCCGTGGTGGCCATG  
CCTACTGCACCATCCCCACCTACCCAGCGGCCAGATCGGCTTCATGCTGTGCAGCAAGAACCCGAGCAC  
GAATTCAGGAGCCGGTGCAGCCGCTGACACAGCAGCAGGTGGCGCAGATGCAGCTGAAGTACTACAAC  
TCCGACGTGCACCGCGCCGCTTTGTGCTGCCGAGTTTGCCCGCAAGGCCCTGAATGATGTGAGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG201761 representing NM\_003132  
 Red=Cloning site Green=Tags(s)

MEPGPDGPAASGPAAIREGWFRETCSLWPGQALSLQVEQLLHRRSRVQDILVFRSKTYGNVLVLDGVIQ  
 CTERDEFSYQEMIANLPLCSHPNPRKVLIIIGGGDGGVLRVVKHPSVESVVQCEIDEDVIQVSKKFLPGM  
 AIGYSSSKLTLHVGDGFEFMKQNQDAFDVITDSSDPMGPAESLFKESYYQLMKTALKEDGVLCCQGECC  
 WLHLDLIKEMRQFCQSLFPVVAYAYCTIPTYPSGQIGFMLCSKNPSTNFQEPVQPLTQQQVAQMQLKYNN  
 SDVHRAAFVLPFARKALNDVS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003132

**ORF Size:** 906 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\\_003132.2](#), [NP\\_003123.2](#)

**RefSeq Size:** 1273 bp

**RefSeq ORF:** 909 bp

**Locus ID:** 6723

**UniProt ID:** [P19623](#)

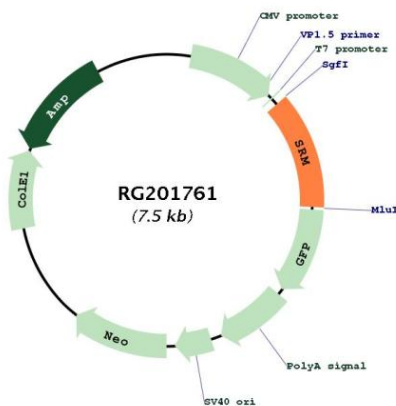
**Cytogenetics:** 1p36.22

**Domains:** Spermine\_synth

**Protein Pathways:** Arginine and proline metabolism, beta-Alanine metabolism, Cysteine and methionine metabolism, Glutathione metabolism, Metabolic pathways

**Gene Summary:** The polyamines putrescine, spermine, and spermidine are ubiquitous polycationic mediators of cell growth and differentiation. Spermidine synthase is one of four enzymes in the polyamine-biosynthetic pathway and carries out the final step of spermidine biosynthesis. This enzyme catalyzes the conversion of putrescine to spermidine using decarboxylated S-adenosylmethionine as the cofactor. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG201761