

Product datasheet for RC201761

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:	Myc-DDK
Symbol:	Spermidine synthase
Synonyms:	PAPT; SPDSY; SPS1; SRML1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201761 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCCGCCCCGACGGCCCCGCGCTCCGGCCCCCGCCATCCGCGAGGGCTGGTTCGCGAGA
CCTGCAGCCTGTGGCCCGCCAGGCCCTGTCGCTGCAGGTGGAGCAGCTGCTCCACCACCGGCGCTCGCG
CTACCAGGACATCCTCGTCTTCCGAGTAAGACCTATGGCAACGTGCTGGTGGACGGTGTATCCAG
TGCACGGAGAGACGAGTTCTCTACCAGGAGATGATCGCCAACCTGCCTCTGCAGCCACCCCAACC
CGCGAAAGGTGCTGATCATCGGGGCGGAGATGGAGGTGCTGCGGGAGGTGGTGAAGCACCCCTCCGT
GGAGTCCGTGGTCCAGTGTGAGATCGACGAGGATGTCATCCAAGTCTCCAAGAAGTTCCTGCCAGGCATG
GCCATTGGCTACTCTAGCTCGAAGCTGACCCTACATGTGGGTGACGGTTTTGAGTTCATGAAACAGAATC
AGGATGCCTTCGACGTGATCATCACTGACTCCTCAGACCCCATGGGCCCGCCGAAAGTCTCTTCAAGGA
GTCCTATTACCAGCTCATGAAGACAGCCCTCAAGGAAGATGGTGTCTCTGCTGCCAGGGCGAGTGCCAG
TGGCTGCACCTGGACCTCATCAAGGAGATGCGGCAGTTTCCAGTCCCTGTTCCCGTGGTGGCCATG
CCTACTGCACCATCCCCACCTACCCAGCGGCCAGATCGGCTTCATGCTGTGCAGCAAGAACCCGAGCAC
GAACTTCCAGGAGCCGGTGCAGCCGCTGACACAGCAGCAGGTGGCGCAGATGCAGCTGAAGTACTACAAC
TCCGACGTGCACCGCGCCGCTTTGTGCTGCCGAGTTTGCCCGCAAGGCCCTGAATGATGTGAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201761 protein sequence
 Red=Cloning site Green=Tags(s)

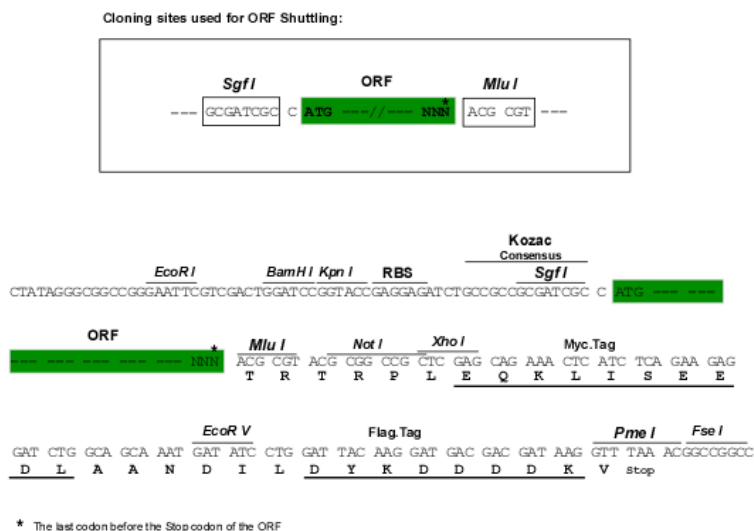
MEPGPDGPAASGPAAIREGWFRETCSLWPGQALSLQVEQLLHHRRSRYQDILVFRSKTYGNVLVLDGVIQ
 CTERDEFSYQEMIANLPLCShPNPRKVLIIIGGGDGGVLEVVKHPSVESVVOCEIDEDVIQVSKKFLPGM
 AIGYSSSKLTLHVGDGFEFMKQNQDAFDVIIITDSSDPMGPAESLFKESYYQLMKTALKEDGVLCCQGECC
 WLHLDLIKEMRQFCQSLFPVVAYAYCTIPTYPSTGQIGFMLCSKNPSTNFQEPVQPLTQQQVAQMQLKYNN
 SDVHRAAFVLPFAFKALNDVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6376_e05.zip

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_003132.3](#)

RefSeq Size: 1273 bp

RefSeq ORF: 909 bp

Locus ID: 6723

UniProt ID: [P19623](#)

Cytogenetics: 1p36.22

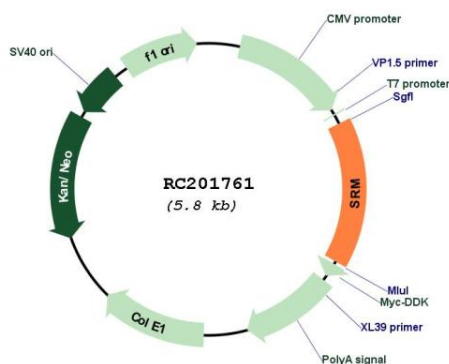
Domains: Spermine_synth

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

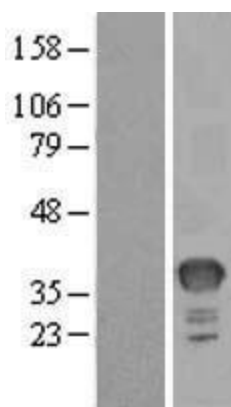
MW: 33.8 kDa

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]

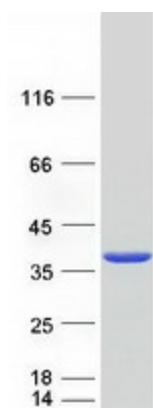
Product images:



Circular map for RC201761



Western blot validation of overexpression lysate (Cat# [LY418875]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201761 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SRM protein (Cat# [TP301761]). The protein was produced from HEK293T cells transfected with SRM cDNA clone (Cat# RC201761) using MegaTran 2.0 (Cat# [TT210002]).