

## Product datasheet for **RR202649**

### Shmt2 (NM\_001008322) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Shmt2 (NM_001008322) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Shmt2
Synonyms:	MGC105820
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR202649 representing NM\_001008322  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTACCCTTCTTTACTTCGGACCACTCGGCCTCTGCAGAGATGTGGTCAGCTGGTCTGCATGGCTG  
 CCCGGGCCAGCACAGTGAGGTGGCCAGAAGCAGGCTGGGAAGCAGCTGGAGGCTGGACGGGCCAGGA  
 GAGTTTATCAGACAGTGACCCTGAGATATGGGAGCTTCTGCAGAGGGAGAAGGACAGACAGTGTCTGGC  
 CTGGAGCTCATCGCCTCAGAGAATTCTGCAGCCGAGCTGCGCTGGAGGCCCTGGGGTCTGTCTCAACA  
 ACAAGTACTCGGAGGGTTACCCTGGCAAGAGATACTACGGAGGAGCAGAAGTCGTGGACGAGATTGAGCT  
 GCTGTGCAGCGCCGGCCTTGAAGCCTTTGACCTGGATCCTGCACAGTGGGGAGTCAATGTGCAGCCG  
 TATTCAGGGTCCCAGCCAACCTGGCTGCCTACACCGCCTTCTGCAGCCTCATGATCGAATCATGGGGT  
 TGGACCTGCCGATGGGGCCACCTCACCCACGGCTACATGTCTGATGTCAAGCGGATCTCTGCCACCTC  
 CATCTTCTCGAGTCCATGCCGTATAAGCTCAATCCCCAAACCGCCTCATCGACTACGACCAGCTAGCG  
 CTGACTGCTCGGCTTTTCCGACCTCGGCTCATCATAGCTGGCACTAGTGCCTATGCCCGCCTCATTGACT  
 ATGCACGAATGAGAGAGGTGTGTGACGAAGTCAAGGCACACCTGCTGGCAGACATGGCCCATATCAGTGG  
 CCTGGTGGCTGCCAAGGTGATCCCCTCACCTTTCAAGTATGCGGACATCGTCACCACCACCACTCACAAG  
 ACTCTTCGAGGGGCCAGGTGAGGACTCATCTTTACCGGAAGGGAGTGGGACTGTAGACCCCAAGACTG  
 GCCAAGAGATCCCTTATACTTTTGGAGCAGAATCAACTTCGCTGTGTTCCCATCCTTACAAGGGGGCCC  
 CCACAATCAGCCATTGCTGCAGTAGCTGTGGCTCTCAAGCAGCCTGCACCCCTATGTTCCGGGAGTAC  
 TCCTTACAAGTGTTCGGAACGCCAAGCCATGGCCGACGCCCTGCTCAAGCGAGGATACTCGCTGGTGT  
 CTGGTGGCACTGACACCCACCTGGTGTCTGGTGGACCTGCGGCCCAAGGGCCTGGATGGAGCACGGCCGA  
 GCGTGTGTTGGAGCTTGTGCCATCACAGCCAACAAGAACACCTGTCTGGAGACCGGAGTGCCATTACT  
 CCGGGAGGCTTGGGCTTGGGGCCAGCATTGACTTCTCGTCAATTCCGTGAGGATGACTTCCGGAGGG  
 TCGTTGATTTTATCGATGAAGGAGTCAACATTGGCTTGGAGGTGAAGCGCAAGACTGCCAAACTTCAGGA  
 TTTCAAGTCTTCTGCTCAAGGACCCAGAAACAAGTCAGCGTTTGGCCAACCTCCGGCAACAGGTGGAA  
 CAGTTTGCAGGGGCTTCCCAATGCCTGGATTTGATGAACGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR202649 representing NM\_001008322  
 Red=Cloning site Green=Tags(s)

MVPFSLLRTRPLQRCGQLVCMAARAHSEVAQKQAGEAAGGWTGQESLSDSDPEIWELLQREKDRQCRG  
 LELIASENFCSRAALEALGSCLNNKYSEGYPGKRYYGGAEVVDEIELLCQRRALEAFDLPAQWGVNVQP  
 YSGSPANLAAYTALLQPHDRIMGLDLPDGGHLTHGYMSDVKRISATSIFFESMPYKLNPTGLIDYDQLA  
 LTARLFRPRLIIAGTSAYARLIDYARMREVCDEVKAHLLADMAHISGLVAAKVIPSPFKYADIVTTTTHK  
 TLRGARSGLIFYRKGVRTVDPKTGQEIPTYTFEDRINFVFPQLQGPHNHIAAVALKQACTPMFREY  
 SLQVLRNAQAMADALLKRGYSLVSGGTDTHLVLVDLRPKGLDGARAERVLELVSITANKNTCPGDRSAIT  
 PGGLRLGAPALTSRQFREDDFRRVVDVIDEGVNIIGLEVKRKTAKLQDFKSFLLKDPETSQRLANLRQVE  
 QFARGFPMPGFDER

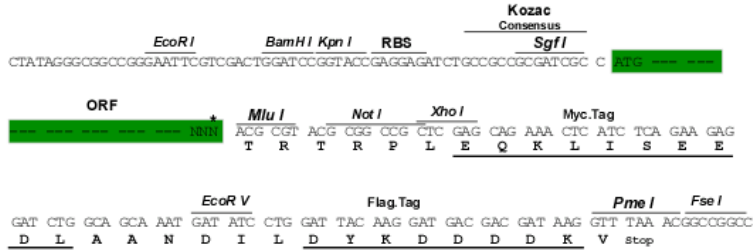
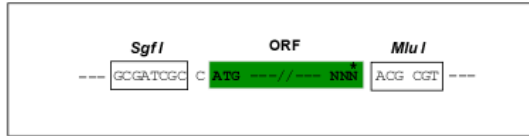
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

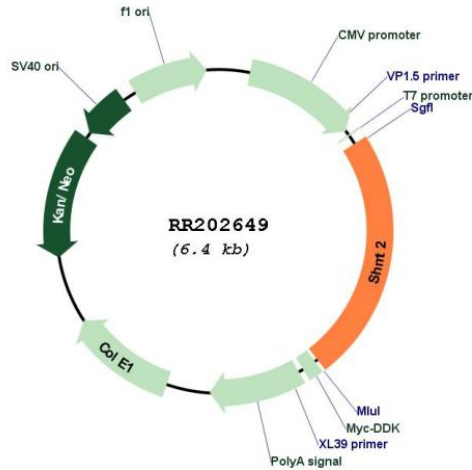
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_001008322

ORF Size: 1512 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\\_001008322.1](#), [NP\\_001008323.1](#)

**RefSeq Size:** 2075 bp

**RefSeq ORF:** 1515 bp

**Locus ID:** 299857

**Cytogenetics:** 7q22

**MW:** 55.8 kDa