

## Product datasheet for **MG217383**

### Srrt (NM\_031405) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Srrt (NM_031405) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Srrt
Synonyms:	2810019G02Rik; Ars2; Asr2; ASR2A; ASR2B; ASR2C; ASR2D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>MG217383 representing NM\_031405  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGTGACAGTGATGATGAATACGACCGAAGACGCAGGGACAAATTTCAAGAGAGCGCAGCGATTATG  
 ACCGTTCCCGGAAAGGGATGAAAGACGGCGAGGGGACGATTGGAATGACCGAGAGTGGGACCGTGCCG  
 GGAGCGCCGAGTCGGGGTGAATATCGAGACTACGACAGGAACCGAAGGGAGCGCTTCTCTCCCCCTCGA  
 CACGAACAAGCCCCCCAGAAGCGCATGCGGAGAGACTGGGATGAGCACAGCTCTGACCCATACCACA  
 GTGGCTATGACATGCCCTATGCTGGGGGGGTGGGGACCAACTTACGGCCCCCTCAGCCCTGGGGCCA  
 CCCAGACGTCCACATCATGCAGCACCATGTCTGCCCATCCAGGCCAGGCTGGGCAGCATCGCAGAGATT  
 GACTTGGGGGTGCCACCGCCATAATGAAGTCCTTCAAAGAGTTCCTCTGTCTCTGGATGACTCTGTGG  
 ATGAGACAGAGGCAGTTAAACGCTACAATGACTACAAGCTGGACTCCGAAGGCAGCAGATGCAGGACTT  
 TTTCTGGCTCACAAGACGAGGAGTGGTTCGGATCTAAGTACCACCCTGATGAGGTGGGAAAGCGTCGG  
 CAGGAGGCCCGGGGGCCCTGCAGAACCGCTGAAGGTGTTCTGTCCCTCATGGAGAGTGGCTGGTTTG  
 ATAACTTCTCTTGACATAGACAAAGCTGATGCCATTGTCAAGATGCTAGATGCAGCTGTCATTAGAT  
 GGAAGGTGGCACAGAAACGATCTCCGAATTTGGAGCAGGAGGAGGAGGAACAGGCAGGCAAGACT  
 GGGGAGGCCAGCAAGAAAGAGGAGGCCGCTGCTGGACCAGCCCTGGGAGAAGGAGAGCGCAAAGCCAATG  
 ATAAGGATGAGAAGAAAGAGATGGAACACAGGCTGAGAATGACAGTTCCAACGATGACAAAATAAAAA  
 ATCTGAGGGTGTGGGGACAAGGAGGAGAAGAAAGAGGCTGAGAAGGAAGCCAAAAGAGCAAGAAG  
 CGGAACAGGAAGCAGAGTGGCGATGACAGCTTCGATGAGGGCAGTGTGTCGAGTCTGAGTCCGAGTCTG  
 AGGTGGCCAGGCCAGGAGGAGAAGGAGGAGGCCGAAGAAAGCACTTAAAGAAAAGGAGAAGCCAAAAGA  
 GGAGGAGAAGGAGAAGCCTAAGGATGCTCAGGGTTGGAGTGAAGCCCGGCCCTTGCATAAGACTTGC  
 TCTCTTTCATGCGCAACATCGCACCAACATTTCAAGGGCAGAGATCATTTCTTTGTAACGATACC  
 CAGGCTTTATGCGAGTGGCACTGTGAGGCCAGCCAGAGAGGAGGTTTTTTTCGCCGTGGCTGGGTGAC  
 TTTTGACCGCAGTGTTAACATTAAGGAGATCTGTTGGAACCTGCAGAACATTCGGCTCCGGGAGTGTGAA  
 CTGAGTCCCGGTGTGAACAGAGACCTGACCCGTCGTGTCGCAACATAAATGGCATTACACAGCACAAAGC  
 AGATAGTGCCAATGACATCAAGTTGGCAGCAAGCTAATCCACACACTGGATGACAGGACCCAGCTCTG  
 GGCCTCTGAGCCTGGGACGCTCCTGTGCCACAAGCCTCCCTCGAAAACCCATCCTGAAGAATC  
 ACTGACTACCTGATTGAGGAAGTGAAGTGGGAGGAGGAGCTTCTGGGAGCAGTGGGGACCCCTC  
 CTGAGGAGCCTCCAAGGAGGGCAACCCAGCCGAGATCAACGTGGAGAGAGATGAGAAGCTGATCAAGGT  
 CTTGGATAAACTTCTTCTATTTGCGTATTGTGCATTCTCTGGATTATTATAACACCTGTGAGTACCCT  
 AATGAAGACGAGATGCCAACCGCTGTGGCATAATCCACGTTCCGGGGCCCATGCCTCCCAACCGAATTA  
 GTCACGGAGAAGTGTGGAGTGGCAGAAGACATTTGAGGAGAACTGACTCCACTGTTGAGTGTGCGTGA  
 ATCCCTTTCTGAGGAAGAGGCCAGAAGATGGGTGCAAAAGACCCAGAGCAGGAAGTGGAGAAGTTTGTG  
 ACCTCCAACACGCAGGAAGTGGCAAGGATAAGTGGCTATGTCCTCTCAGTGGCAAGAAATCAAGGGCC  
 CGGAGTTTGTGCGCAAGCATATCTTCAATAAGCATGCCGAGAAGATCGAGGAGGTGAAGAAGGAGGTGGC  
 GTTCTTCAATAACTTTCTCACAGACGCCAAGCGCCAGCTTTGCCTGAGATCAAGCCAGCTCAGCCACCT  
 GGCCCTGCCAGATACTCCCCCAGGCCTGACCCAGGACTTCCCTACCCACATCAGACGCCACAGGGCT  
 TGATGCCATATGGTCAGCCCCGGCTCCCATCTTGGGCTATGGAGCTGGTGTGTCGCCCTGCAGTCCC  
 AACAGGAGGGCTCCATACCCCATGCTCCATATGGTGCCGGCCGTGGGAACTATGATGCTTTTCGAGGC  
 CAAGGCGGTTATCCTGGGAAACCTCGGAACAGGATGGTTCGAGGAGACCAAGGGCCATAGTGGAGTATC  
 GGGACCTGGATGCCCGGATGATGTTGACTTCTTT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG217383 representing NM\_031405  
 Red=Cloning site Green=Tags(s)

MGDSDDEYDRRRRDKFRRERSDYDRSREDRERRRGGDDWNDREWDRGRERRSRGEYRDYDRNRRERFSPPR  
 HELSPPQKRMRRDWEHSSDPYHSGYDMPYAGGGGGPTYGPPQPWGHDPVHIMQHHLVLPQARLGSIAEI  
 DLGVPPPIMKSFKEFLSLDSDVDETEAVKRYNDYKLDFFRRQQMQDFFLAHKDEEWFRSKYHPDEVGKRR  
 QEARGALQNRLLKVFSLMESGWFDNLLLDIDKADAIKMLDAAVIKMEGGTENDLRILEQEEEEEQAGKT  
 GEASKKEEARAGPALGEGERKANDKDEKKEDGKQAEENDSSNDDKTKKSEGDKKEEKKEEAEKEAKKSKK  
 RNRKQSGDSDSFDSESVSESESESEGGQAEEEEKEEAEALKEKEKPKEEKEKPKDAAGLECKPRPLHKTC  
 SLFMRNIAPNISRAEIIISLCKRYPGFMRYALSEPQPERFFRRGWVTFDRSVNIKEICWNLQNIIRLRECE  
 LSPGVNRDLTRVRNINGITQHKQIVRNDIKLAAKLIHTLDDRTQLWASEPGTPPVPTSLPSQNPILKNI  
 TDYLIIEEVSAAAAEELGSSGGPPPEPPKEGNPAEINVERDEKLKVLKLLLYLRIVHSLDYNTCEYP  
 NEDEMPNRCGIIHVRGMPNRIISHGEVLEWQKTFEELKTPLLSVRESLSEEAQKMGKRDPEQEVEKQV  
 TSNTQELGKDKWLCPLSGKKFKGPEFVRKHIFNKHAEKIEEVKKEVAFFNNFLTDARLPAPEIKPAQPP  
 GPAQILPPGLTPGLPYPHQTPQGLMPYQPRPPIILGYGAGAVRPAVPTGGPPYPHAPYGAGRGNDAFRG  
 QGGYPGKPRNRMVRGDPRAIVEYRDLAPDDVDF

TRTRPLE - GFP Tag - V

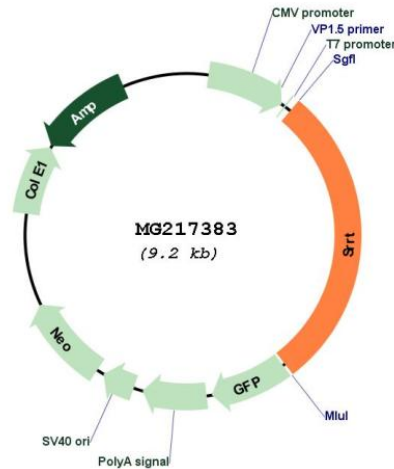
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_031405

ORF Size: 2625 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\\_031405.2](#), [NP\\_113582.1](#)

RefSeq Size: 3039 bp

RefSeq ORF: 2628 bp

Locus ID: 83701

UniProt ID: [Q99MR6](#)

**Cytogenetics:** 5 G2

**Gene Summary:** Acts as a mediator between the cap-binding complex (CBC) and the primary microRNAs (miRNAs) processing machinery during cell proliferation. Contributes to the stability and delivery of capped primary miRNA transcripts to the primary miRNA processing complex containing DGCR8 and DROSHA, thereby playing a role in RNA-mediated gene silencing (RNAi) by miRNAs. Binds capped RNAs (m7GpppG-capped RNA); however interaction is probably mediated via its interaction with NCBP1/CBP80 component of the CBC complex. Involved in cell cycle progression at S phase. Does not directly confer arsenite resistance but rather modulates arsenic sensitivity. Independently of its activity on miRNAs, necessary and sufficient to promote neural stem cell self-renewal. Does so by directly binding SOX2 promoter and positively regulating its transcription.[UniProtKB/Swiss-Prot Function]