

## Product datasheet for **SC119478**

### Serotonin transporter (SLC6A4) (NM\_001045) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Serotonin transporter (SLC6A4) (NM_001045) Human Untagged Clone
Tag:	Tag Free
Symbol:	SLC6A4
Synonyms:	5-HTT; 5-HTTLPR; 5HTT; hSERT; HTT; OCD1; SERT; SERT1
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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Fully Sequenced ORF: >OriGene ORF within SC119478 sequence for NM\_001045 edited (data generated by NextGen Sequencing)

```
ATGGAGACGACGCCCTTGAATTCTCAGAAGCAGCTATCAGCGTGTGAAGATGGAGAAGAT
TGTCAGGAAAACGGAGTTCTACAGAAGGTTGTTCCACCCAGGGGACAAAGTGGAGTCC
GGGCAAATATCCAATGGGTA CTACAGAGTTCCAAGTCTGGTGC GGGGAGATGACACACGG
CACTCTATCCCAGCGACCACCACCACCTAGTGGCTGAGCTTCATCAAGGGGAACGGGAG
ACCTGGGGCAAGAAGGTGGATTTCTTCTCAGTGATTGGCTATGCTGTGGACCTGGGC
AATGTCTGGCGCTTCCCCTACATATGTTACCAGAATGGAGGGGGGCATTCTCCTCCCC
TACACCATCATGGCCATTTTTGGGGGAATCCCGCTCTTTTACATGGAGCTCGCACTGGGA
CAGTACCACCGAAATGGATGCATTTCAATATGGAGGAAAATCTGCCGATTTTCAAAGGG
ATTGGTTATGCCATCTGCATCATTGCCTTTTACATTGCTTCTACTACAACACCATCATG
GCCTGGGCGCTATACTACCTCATCTCCTCCTTACGGACCAGCTGCCCTGGACCAGCTGC
AAGAACTCCTGGAACACTGGCAACTGCACCAATTACTTCTCCGAGGACAACATCACCTGG
ACCCTCCATTCCACGTCCCCTGCTGAAGAATTTTACACGCGCCACGTCTGCAGATCCAC
CGGTCTAAGGGGCTCCAGGACCTGGGGGGCATCAGCTGGCAGCTGGCCCTCTGCATCATG
CTGATCTTCACTGTTATCTACTT CAGCATCTGAAAGGCGTCAAGACCTCTGGCAAGGTG
GTGTGGGTGACAGCCACCTTCCCTTATATCATCCTTTCTGTCTGCTGGTGGGGGTGCC
ACCTCCCTGGAGCCTGGAGGGGTGTTCTTCTACTTGA AACCAATTGGCAGAAACTC
CTGGAGACAGGGGTGGGATAGATGCAGCCGCTCAGATCTTCTTCTCTTGGTCCGGGC
TTTGGGGTCTGCTGGCTTTTGTAGCTACAACAAGTTCAACAACA ACTGCTACCAAGAT
GCCCTGGTGACCAGCGTGGTGA ACTGCATGACGAGCTTCGTTTCGGGATTTGTCATCTTC
ACAGTGCTCGGTTACATGGCTGAGATGAGGAATGAAGATGTGTCTGAGGTGGCCAAAGAC
GCAGTCCCAGCCTCCTCTTCATCAGTATGCAGAAGCGATAGCCAACATGCCAGCGTCC
ACTTTCTTTGCCATCATCTTCTTTCTGATGTTAATCACGCTGGGCTTGGACAGCACGTTT
GCAGGCTTGGAGGGGTGATCACGGCTGTGCTGGATGAGTTCCACACGTCTGGGCAAG
CGCCGGGAGCGGTTCTGCTCGCCGTGGT CATCACCTGCTTCTTTGGATCCCTGGTCACC
CTGACTTTTGGAGGGCCTACGTGGTGAAGCTGCTGGAGGAGTATGCCACGGGGCCCGCA
GTGCTCACTGTCGCGCTGATCGAAGCAGTCGCTGTGTCTTGGTTCTATGGCATCACTCAG
TTCTGCAGGGACGTGAAGGAAATGCTCGGCTT CAGCCGGGGTGGTTCTGGAGGATCTGC
TGGGTGGCCATCAGCCCTCTGTTTCTCCTGTT CATCATTTGCAGTTTTCTGATGAGCCCG
CCACAAC TACGACTTTTCCAATATAATTATCCTTACTGGAGTATCATCTTGGGTTACTGC
ATAGGAACTCATCTTTCA TTTGCATCCCACATATATAGCTTATCGGTTGATCATCACT
CCAGGGACATTTAAAGAGCGTATTATTA AAAAGTATTACCCAGAAACACCAACAGAAATT
CCTTGTGGGGACATCCGCTTGAATGCTGTGTAA
```

Clone variation with respect to NM\_001045.4

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_001045 unedited  
GCGTCAGCATTTGTAAACGACTCATATAGGGCGGCCGGAATTCGCACCAGGTCCCTCCC  
CTCCTGGCTCTGGGGTCGGGCGCGCACCCCGCCCGTAGCGCGGCCCTCCCTGGCGAGC  
GCAACCCCATCCAGCGGGAGCGCGGAGCCGCGGCCGCGGGGAAGCATTAAAGTTTATTCGC  
CTCAAAGTGACGCAAAAATCTTCAAGAGCTCTTTGGCGCGGCTATCTAGAGATCAGAC  
CATGTGAGGGCCCGGGTACAAATACGGCCGCGCCGCGGCCCTCCGCACAGCCAGCGC  
CGCCGGGTGCCTCGAGGGCGGAGGCCAGCCCGCTGCCAGCCGGGACCAGCCTCCCC  
GCGCAGCCTGGCAGAGTCAATCCCGACGTGTAATCCCGACGATAGAGAGCTCGGAGGTG  
ATCCACAATCCAAGCACCCAGAGATCAATTGGGATCCTTGGCAGATGGACATCAGTGTC  
ATTTACTAACCAGCAGGATGGAGACGACGCCCTTGAATTCTCAGAAGCAGCTATCAGCGT  
GTGAAGATGGAGAAGATTGTGAGAAAACGGAGTTCTACAGAAGTTGTTCCACCCAG  
GGGACAAAGTGGAGTCCGGGCAATATCCAATGGGTAAGTACTCAGCAGTTCCAAGTCTGGT  
CGGGAGATGACACACGGCACTCTATCCAGCGACCACCACCCTAGTGGCTGAGCTTC  
ATCAGGGGAACGGGAGACCTGGGGCAAGAAGTGGGATTTCTCTCAGTGATGGCT  
ATGCTGTGGACCTGGCAATGTCTGGCGTTCCTACTATGTTACCAGAATGGAGGGNGG  
GGCATTCTNCTNCCCTAAACATCATGGCATTGTTGGGAAATCCGCTCTTTACTGGAG  
CTCGCACTG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_001045 unedited  
AAATACTATGGATCGCTGCCGATCTCTAGTTGTTTTTTTTTTTTTTTTTTTTTTTGTGATTG  
GTAGAATTTGTTACTGTAAGAAAAATTGGGAATTCATATATTTGTAATGGGCCAAAAT  
ATTGGACTAGAGATAAGAATACACTGGAACAACAATATACACAGACTCACAAGCTTGCA  
TGGACACACTATTTTTCATTTTAGCTTCTTACATCTTCCTTTCTGATGCCACAGCAGCA  
CATGGATTAGAAGTTCTAGTAGATCCAGCAATAAAATCTATATGCTACTCAGAAAAT  
ATATGGCTAGCGAGATAGCATCCCTGTTCTCTCCTACGCAGTTTACGTATTCATGAACAG  
TGAAACCTTTAGAAGCAACAGATATCAGATACCAATGATCATACCAAGAAATGATACAG  
GAGACTTTCACAGACTTGATTCTAAACCTAATCCTAAGTATGATAGGGTGGTTTTTCATC  
ACCTCCATCCACATCCTCACACGTCCAAAATAGGCCAGCTCAGCTGTGTACAGTCTACC  
ATGGGAATATGTCCAGGGGAATCCATGGAATAAGTGGCTGGAGGCCTTGAGTCTGGGCA  
CCAGACTGTGTCCCTGTGGAGAATGCCCTTCCATCATCAGGCTTAGCTGGAAACTATT  
ACTTGGGAGGGGAGAAGGCANGCGTGCCTCATCAGAAGTGGNAGAGANGTGTGGANAA  
ACCTTTTTCTCTCGGTGAGTGTGTTACACAGCATTCAAGCGGATGTCCCAAAAAGAAAT  
TTCTGGTGGTGGTTTCTGGGTAATACCTTNTAATAANTACGCTCTTTAAATGTCCTCG  
AGTGATGATCAACCGATNAGCTATATATGTGGGGATGCAATGAAAGATGAGGT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_001045

**Insert Size:**

3100 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**RefSeq:** [NM\\_001045.2](#), [NP\\_001036.1](#)

**RefSeq Size:** 2756 bp

**RefSeq ORF:** 1893 bp

**Locus ID:** 6532

**UniProt ID:** [P31645](#), [B2R7Y7](#)

**Domains:** SNF, 5HT\_transporter

**Protein Families:** Druggable Genome, Transmembrane

**Gene Summary:** This gene encodes an integral membrane protein that transports the neurotransmitter serotonin from synaptic spaces into presynaptic neurons. The encoded protein terminates the action of serotonin and recycles it in a sodium-dependent manner. This protein is a target of psychomotor stimulants, such as amphetamines and cocaine, and is a member of the sodium:neurotransmitter symporter family. A repeat length polymorphism in the promoter of this gene has been shown to affect the rate of serotonin uptake. There have been conflicting results in the literature about the possible effect, if any, that this polymorphism may play in behavior and depression. [provided by RefSeq, May 2019]