

Product datasheet for **RG210187**

Serotonin transporter (SLC6A4) (NM_001045) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Serotonin transporter (SLC6A4) (NM_001045) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Serotonin transporter
Synonyms:	5-HTT; 5-HTTLPR; 5HTT; hSERT; HTT; OCD1; SERT; SERT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG210187 representing NM_001045
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGACGACGCCCTTGAATTCTCAGAAGCAGCTATCAGCGTGTGAAGATGGAGAAGATTGTCAGGAAA
 ACGGAGTTCTACAGAAGTTGTTCCACCCAGGGGACAAAGTGGAGTCCGGGCAATATCCAATGGGTA
 CTCAGCAGTTCCAAGTCTGGTGCGGGAGATGACACACGGCACTCTATCCAGCGACCACCACCACCTA
 GTGGCTGAGCTTCATCAAGGGGAACGGGAGACCTGGGGCAAGAAGGTGGATTTCTTCTCTCAGTGATTG
 GCTATGCTGTGGACCTGGGCAATGTCTGGCGCTTCCCCTACATATGTTACCAGAATGGAGGGGGGCATT
 CCTCTCCCTACACCATCATGGCCATTTTTGGGGGAATCCCGCTCTTTTACATGGAGCTCGCACTGGGA
 CAGTACCACCGAAATGGATGCATTTCAATATGGAGGAAAATCTGCCCGATTTTCAAAGGGATTGGTTATG
 CCATCTGCATCATTGCCTTTTACATTGCTTCTACTACAACACCATCATGGCCTGGGCGCTATACTACCT
 CATCTCCTCCTTACGGACCAGCTGCCCTGGACCAGCTGCAAGAACTCCTGGAACACTGGCAACTGCACC
 AATTACTTCTCCGAGGACAACATCACCTGGACCCTCCATTCCACGTCCCTGCTGAAGAATTTTACACGC
 GCCACGTCTGCAGATCCACCGTCTAAGGGGCTCCAGGACCTGGGGGGCATCAGCTGGCAGCTGGCCCT
 CTGCATCATGCTGATCTTCACTGTTATCTACTTCAAGTCTGAAAGGCGTCAAGACCTCTGGCAAGGTG
 GTGTGGGTGACAGCCACCTTCCCTTATATCATCTTTCTGTCTGCTGGTGGAGGGGTGCCACCCTCCCTG
 GAGCCTGGAGGGGTGTTCTTCTACTTAAACCAATTTGGCAGAACTCCTGGAGACAGGGGTGGAT
 AGATGCAGCCGCTCAGATCTTCTCTCTTGGTCCGGCTTTGGGGTCTGTGGCTTTTGGTGTAGTAC
 AACAAAGTTCAACAACAACACTGCTACCAAGATGCCCTGGTAACCAGCGTGGTGAAGTGCATGACGACCTCG
 TTTCCGGGATTTGCATCTTACAGTGTCTGGTTACATGGCTGAGATGAGGAATGAAGATGTGTCTGAGT
 GGCCAAAGACGCAGGTCCAGCCTCCTTTCATCACGTATGCAGAAGCGATAGCCAACATGCCAGCGTCC
 ACTTTCTTTGCCATCATCTTCTTCTGATGTTAATCACGCTGGGCTTGGACAGCACGTTTGCAGGCTTGG
 AGGGGGTGTACAGGCTGTGCTGGATGAGTTCACACAGCTCTGGGCAAGCGCCGGGAGCGGTTCTGTCT
 CGCCGTGGTTCATCACCTGCTTCTTTGGATCCCTGGTACCCTGACTTTTGGAGGGGCTACGTGGTGAAG
 CTGCTGGAGGAGTATGCCACGGGCCCCGAGTCTCACTGTGCGCTGATCGAAGCAGTCTGTGTCTT
 GGTCTATGGCATCACTCAGTTCTGCAGGGACGTGAAGGAAATGCTCGGTTTACGCCGGGTGTTCTG
 GAGGATCTGCTGGTGGCCATCAGCCCTCTGTTTCTCTGTTTTCATCATTTCAGTCTTCTGATGAGCCCG
 CCACAACACTACGACTTTTCCAATATAATTATCCTTACTGGAGTATCATCTTGGGTTACTGCATAGGAACCT
 CATCTTTTCAATTCATCCACATATATAGCTTATCGGTTGATCATCACTCCAGGACATTTAAAGAGCG
 TATTATTAAGTATTACCCAGAAACCAACAGAAATTCCTTGTGGGGACATCCGCTTGAATGCTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG210187 representing NM_001045
 Red=Cloning site Green=Tags(s)

METTPLNQKQLSACEDGEDCQENGLVQKVVPTPGDKVESGQISNGYSAVSPGAGDDTRHSIPATTTTL
 VAEHQGERETWGGKVFLLSVIGYAVDLGNVWRFPYICYQNGGAFLLPYTIMAIFGGIPLFYMELALG
 QYHRNGCISIWRIKICPIFKGIGYAICIIAFYIASYYNTIMAWALYYLISSFTDQLPWTSCKNSWNTGNCT
 NYFSEDNITWTLHSTSPAEFYTRHVLQIHRSKGLQDLGGISWQLALCIMLIFTVIYFSIWKGVKTSKGV
 VVVTATFPYIILSVLLVRGATLPGAWRVLFYLPKPNWQKLLLETGVWIDAAAQIFFSLGPGFVLLAFASY
 NKFNNNCYQDALVTSVNCMTSFVSGFVIFTVLGYMAEMRNEDVSEVAKDAGPSLLFITIAEIANMPAS
 TFFAIIFFLMLITLGLDSTFAGLEGVITAVLDEFPHVWAKRRERFVLAIVITCFFGSLVTLTFGGAYVVK
 LLEEYATGPAVLTVLIEAVAVSWFYGITQFCRDVKEMLGFSPGWFWRICWVAISPLFLFIICFLMSP
 PQLRFLQYNYPYWSIILGYCIGTSSIFICIPTYIAYRLIITPGTFKERRIISITPETPTEIPCGDIRLNAV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001045

ORF Size: 1890 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 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](#)

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).

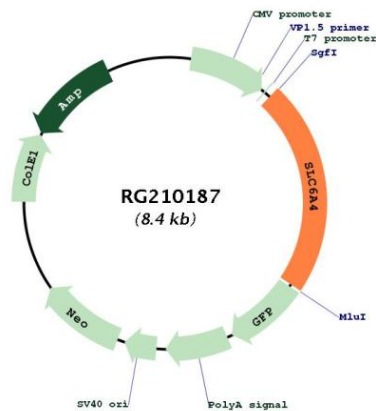
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_001045.2](#), [NP_001036.1](#)

RefSeq Size:	2756 bp
RefSeq ORF:	1893 bp
Locus ID:	6532
UniProt ID:	P31645
Cytogenetics:	17q11.2
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]

Product images:



Circular map for RG210187