

## Product datasheet for **RC210187**

### 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:	Myc-DDK
Symbol:	Serotonin transporter
Synonyms:	5-HTT; 5-HTTLPR; 5HTT; hSERT; HTT; OCD1; SERT; SERT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC210187 representing NM\_001045  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGAGACGACGCCCTTGAATTCTCAGAAGCAGCTATCAGCGTGTGAAGATGGAGAAGATTGTCAGGAAA  
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**Protein Sequence:**

>RC210187 representing NM\_001045  
 Red=Cloning site Green=Tags(s)

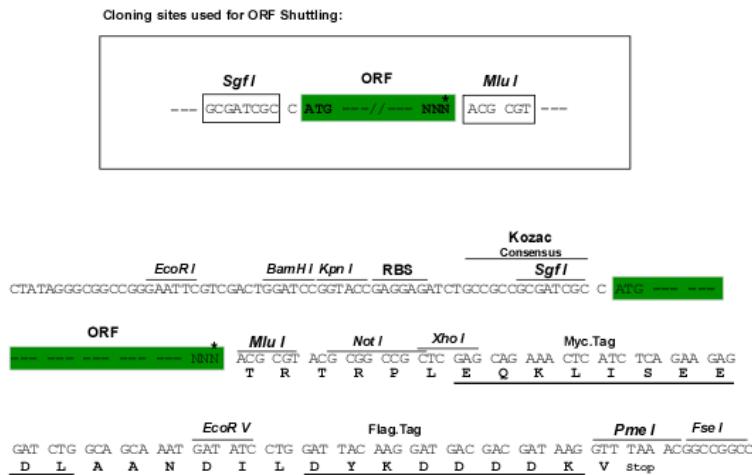
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 LLEEYATGPAVLTVALLIEAVAVSWFYGITQFCRDVKEMLGFSPGWFWRICWVAISPLFLFFIICSFLMSP  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2553\\_c02.zip](https://cdn.origene.com/chromatograms/mg2553_c02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**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](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](#)

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001045.6](#)

**RefSeq Size:** 2756 bp

**RefSeq ORF:** 1893 bp

**Locus ID:** 6532

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

**Cytogenetics:** 17q11.2

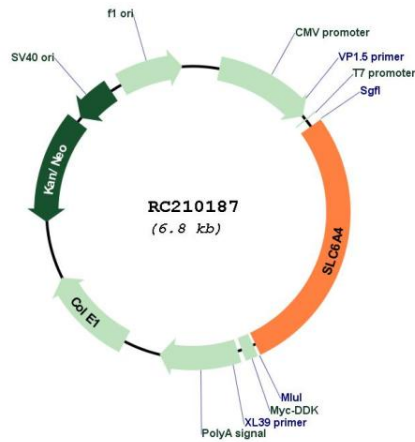
**Domains:** SNF, 5HT\_transporter

**Protein Families:** Druggable Genome, Transmembrane

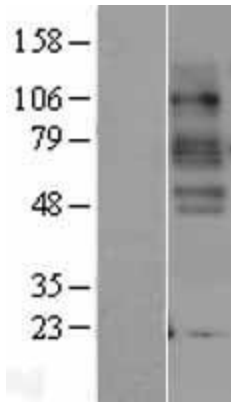
**MW:** 70.1 kDa

**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]

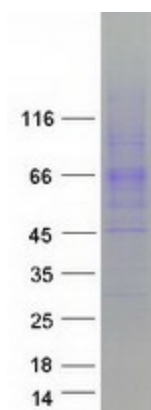
Product images:



Circular map for RC210187



Western blot validation of overexpression lysate (Cat# [LY400427]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210187 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC6A4 protein (Cat# [TP310187]). The protein was produced from HEK293T cells transfected with SLC6A4 cDNA clone (Cat# RC210187) using MegaTran 2.0 (Cat# [TT210002]).