

## Product datasheet for **RC226025**

### SLC6A12 (NM\_001122847) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC6A12 (NM_001122847) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC6A12
Synonyms:	BGT-1; BGT1; GAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC226025 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGACGGGAAGGTGGCAGTGAAGAGCGTGGCCTCCTGCGGTCTCCTGGTCCCCGAGGAGGAGAGA  
 AGTTGGACCAGGAAGACGAGGACCAGGTGAAGGATCGGGGCAATGGACCAACAAGATGGAGTTTGTGCT  
 GTCAGTGGCCGGGAGATCATTGGGCTGGCAATGTCTGGAGTTTCCCTATCTCTGCTACAAAAACGGA  
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 CATTGGTCTGGCATCTGTGGTATCGAGTCATATTTGAATGTCTACTACATCATCATCTTGCCTGGGCT  
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 CATTGGCTGGTCTGCTCCTCCATGGTCTGTGTCCACTTTCGTGTCATCACCTCCTGAAG  
 ACTCGGGTCTTTCAGGAAGCGTCTGCGTCAGCTCATACCCCTGACTCCAGTCTGCCACAGCCCAAGC  
 AACATCCCTGCTTGGATGGCAGTCTGGCCGGAACCTTTGGGCCCTCCCAACAAGGAAGGACTGATAGC  
 CGGGGAGAAGGAGACCCATTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC226025 protein sequence  
 Red=Cloning site Green=Tags(s)

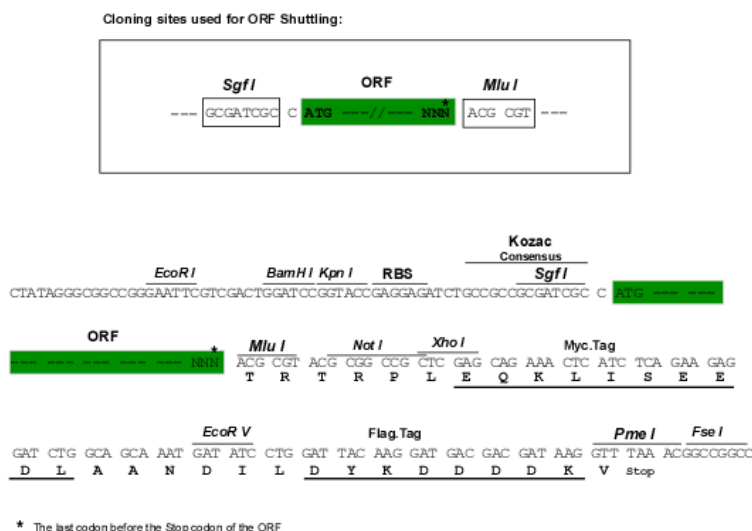
MDGKVAVQERGPAPVSWVPEEGEKLDQEDEDQVKDRGQWTNKMEFVLSVAGEIIGLGNVWRFYLYCYKNG  
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 RELILITIAVMCYLIGLFLVTEGGMYIFQLFDYYASSGICLLFLSLFEVVCISWVYGADRFYDNIEMIG  
 YRPWPLVKISWFLTPGLCLATFLFSLSKYTPLKYNVYVYPPWYSIGWFLALSSMVCVPLFVVITLLK  
 TRGPFKRRLRQLITPDSLPQPKQHPCLDGSAGRNFGPSPTREGLIAGEKETHL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6275\\_b10.zip](https://cdn.origene.com/chromatograms/mk6275_b10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001122847

ORF Size: 1842 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.

**RefSeq:** [NM\\_001122847.3](#)

**RefSeq Size:** 3165 bp

**RefSeq ORF:** 1845 bp

**Locus ID:** 6539

**UniProt ID:** [P48065](#)

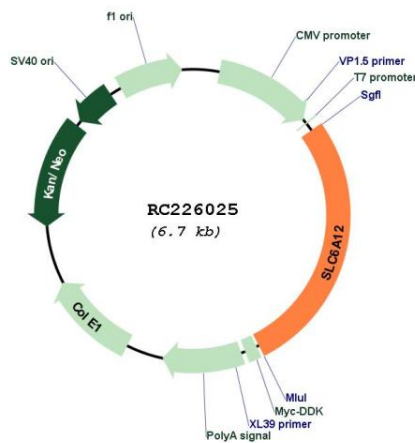
**Cytogenetics:** 12p13.33

**Protein Families:** Druggable Genome, Transmembrane

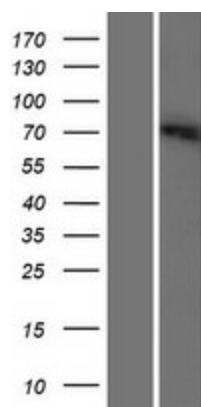
**MW:** 69.4 kDa

**Gene Summary:** Transports betaine and GABA. May have a role in regulation of GABAergic transmission in the brain through the reuptake of GABA into presynaptic terminals, as well as in osmotic regulation.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC226025



Western blot validation of overexpression lysate (Cat# [LY426579]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226026] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).