

Product datasheet for **RC222855**

SLC6A12 (NM_003044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC6A12 (NM_003044) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC222855 representing NM_003044
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGACGGGAAGGTGGCAGTGAAGAGCGTGGCCTCCTGCGGTCTCCTGGTCCCCGAGGAGGAGAGA
 AGTTGGACCAGGAAGACGAGGACCAGGTGAAGGATCGGGGCCAATGGACCAACAAGATGGAGTTTGTGCT
 GTCAGTGGCCGGGAGATCATTGGGCTGGCAATGTCTGGAGTTTCCCTATCTCTGCTACAAAAACGGA
 GGTGGAGCCTTCTCATCCCCTACTTTCATCTTCTTCTTTGTCTGCGGCATCCCGGTGTTCTTCTGGAGG
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 AGCATTGCACGGACTTTCTGAACCACTCAGGAGCCGGCACAGTGACCCCATTTGAGAATTTTACCTCACC
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 CCACAGGCAAGGTGGTTTATTTACAGCCACGTTTCCGTACCTGATGCTTGTCTATTTGCTGATCAGAGG
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 TGCCACCAGCTTTGTGGCTGGGTTTGTGTCTTCTCCATCCTGGGCTTATGTCCAAGAGCAAGGGGTG
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 TCTTCTCCTTGAAGCAAGTACACCCCTCAAGTACAACAACGCTATGTGTACCCGCCCTGGGGATACTC
 CATTGGCTGGTCTGCTCCTCCATGGTCTGTGTCCACTTTCGTGTCATCACCTCCTGAAG
 ACTCGGGTCTTTCAGGAAGCGTCTGCGTCAGCTCATACCCCTGACTCCAGTCTGCCACAGCCCAAGC
 AACATCCCTGCTTGGATGGCAGTCTGGCCGGAACCTTTGGGCCCTCCCAACAAGGAAGGACTGATAGC
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 ACAAGGATGACGACGATAAGGTTTAA

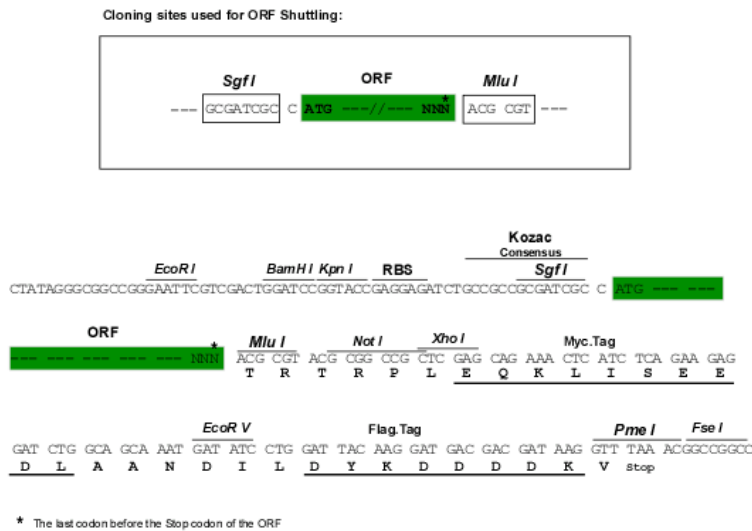
Protein Sequence:

>RC222855 representing NM_003044
 Red=Cloning site Green=Tags(s)

MDGKVAVQERGPVAVSWVPEEGEKLDQEDQVQKDRGQWTKMEFVLSVAGEIIGLGNVWRFYLYCYKNG
 GGAFPIPYFIFFFVCGIPVFFLEVALGQYTSQGSVTAWRKICPLFQIGLASVVIIESYLNYYYIIILAWA
 LFYLFSSFTSELPWTTCCNFWNTEHCTDFLNHSGAGTVPFENFTSPVMEFWERRVLGITSGIHDLSLR
 WELALCLLLAWVICYFCIWKGVKSTGKVVYFTATFPYLMVLVILLIRGVTLPAYQGIYYLKPDLFRLKD
 PQVWMDAGTQIFFSFAICQGLTALGSYNKYHNNCYKDCIALCFLNSATSFVAGFVVFVILGFMSQEQGV
 PISEVAESGPGLAFIAFPKAVTMMPLSQLWSCLFFIMLIFLGLDSQFVCECLVTASIDMFPRQLRKSGR
 RELILITIAVMCYLIGLFLVTEGGMYIFQLFDYYASSGICLLFLSLFEVVCISWVYGADRFYDNIEMIG
 YRPWPLVKISWFLTPGLCLATFLFSLSKYTPLKYNVYVYPPWYSIGWFLALSSMVCVPLFVVITLLK
 TRGPFKRRLRQLITPDSLPQPKQHPCLDGSAGRNFGPSPTREGLIAGEKETHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6275_b10.zip
 Restriction Sites: SgfI-MluI
 Cloning Scheme:



ACCN: NM_003044

ORF Size: 1842 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.

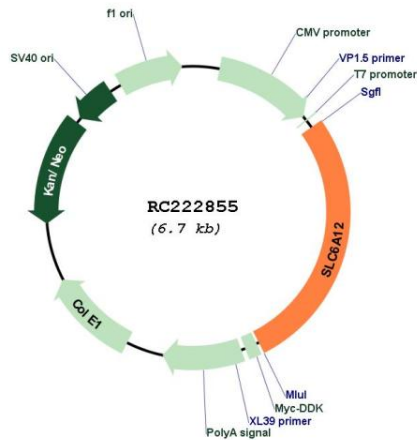
RefSeq: [NM_003044.5](#)

RefSeq Size: 3410 bp

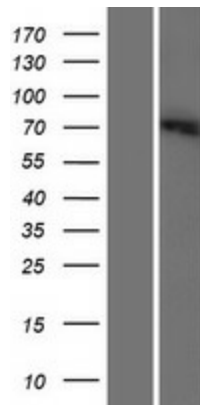
RefSeq ORF: 1845 bp

Locus ID: 6539
UniProt ID: [P48065](#)
Cytogenetics: 12p13.33
Protein Families: Druggable Genome, Transmembrane
MW: 69.2 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 RC222855



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]).