

Product datasheet for **RG206515**

SLC38A3 (NM_006841) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC38A3
Synonyms:	G17; NAT1; SN1; SNAT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG206515 representing NM_006841
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGGCGCCTTTGCAGACAGAGATGGTGGAGCTGGTGCCCAATGGCAAACACTCAGAGGGGCTGCTCC
 CGGTCAACACCCCATGGCAGGCAACCAGAGGGTCGAGGACCCTGCACGGAGCTGTATGGAGGGCAAGAG
 CTTCTACAGAAAAGTCCAGCAAGGAGCCACACTTCACTGACTTCGAGGGGAAGACATCATTCCGGGATG
 TCAGTGTTCAACTCAGCAATGCCATCATGGGCAGCGGCATCCTGGGACTCGCCTATGCCATGGCCAATA
 CGGGCATTATCCTTTCTGTTCTGTGACAGCTGTGCGCTTGTCTCCAGCTACTCCATCCACCTGCT
 ACTCAAGTCCTCAGGGGTCGTGGGCATCCGTGCCTATGAGCAGCTGGGCTACCGTGCCTTTGGGACCCCA
 GGAAAGCTGGCAGCAGCCTGGCCATCACGCTCCAGAACATCGGAGCCATGTCCAGCTACCTGTACATCA
 TCAAGTCTGAGCTGCCACTTGTACATACAGACCTTCTGAACCTGGAGGAGAAAACCTCGGACTGGTACAT
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 GGCTACCTGGGCTACTCCAGCGGCTTCTCTTCTAGCTGCATGGTGTCTTCTAATTGCAGTCATCTACA
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 ACGCTCAACTCACAGACAGCATACCATCCCCATCATGGCCTTCGCTTCCGCTGCCACCCCGAGGTGC
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 TGACAGCAGTCACGCTCACAGTGGCCATCGTTCTGTTCCCGGTGCGCCGCGCCATCCAGCAGATGCTGTT
 TCCAAACCAGGAGTTCACTGGCTGCGGCATGTGCTTATTGCCGTTGGCCTGCTCACTTGTATCAACCTG
 CTGGTCATCTTTGCCCCAACATCCTGGGCATCTTTGGGGTCATCGGTGCCACATCTGCCCCATTCTCA
 TCTTCATCTTCCCTGCCATCTTCTACTTCCGAATCATGCCACGGAGAAGGAGCCTGCAAGATCCACCCC
 CAAAATCCTGGCCTGTGTTTGTATGCTTGGCTTCTGCTGATGACCATGAGCTTGAGCTTCATCATC
 ATTGACTGGGCTCAGGACCAAGCCGCGCATGGAGGAAACCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

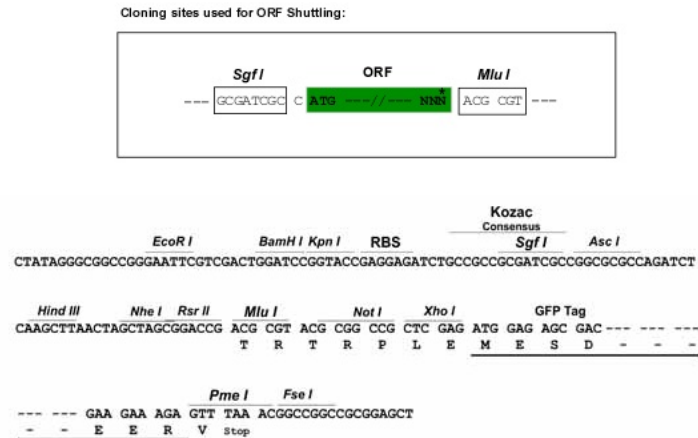
Protein Sequence: >RG206515 representing NM_006841
 Red=Cloning site Green=Tags(s)

MEAPLQTEMVELVPNGKHSEGLLPVITPMAGNQRVEDPARSCMEGKSFLQKSPSKEPHFTDFEGKTSFGM
 SVFNLNAIMGSGILGLAYAMANTGIILFLLLTAVALLSSYSIHLLKSSGVVGIRAYEQLGYRAFGTP
 GKLAALAILTLQNIAMSSYLIIKSELPLVIQTFLNLEEKTSWYMNNGNYLVILVSVTIILPLALMRQL
 GYLGYSSGFSLSMVFLLIAVIYKKFHVPCPLPPNFNNTTGNFSHVEIVKEKVQLQVEPEASAFCTPSYF
 TLNSQTAYTIPIMAFVCHPEVLPIYTELKDPSSKKMQHISNLSIAVMYIMYFLAALFGYLTIFYNGVES
 ELLHTYSKVDPDFVLILCVRVAVLTAVTLTVPIVLFPVRRAIQMLFPNQEFSWLRHVLIAVGLLTCINL
 LVIFAPNILGIFGVIGATSAPFLIFIPAIIFYFRIMPTEKEPARSTPKILALCFAMLGFLMTMSLSFII
 IDWASGTSRHGGNH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006841

ORF Size: 1512 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.

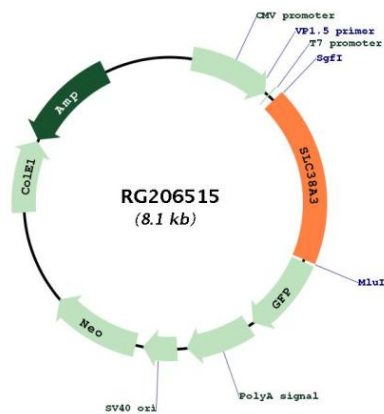
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006841.6](#)

RefSeq Size: 2559 bp

RefSeq ORF:	1515 bp
Locus ID:	10991
UniProt ID:	Q99624
Cytogenetics:	3p21.31
Domains:	Aa_trans
Protein Families:	Transmembrane
Gene Summary:	Sodium-dependent amino acid/proton antiporter. Mediates electrogenic cotransport of glutamine and sodium ions in exchange for protons. Also recognizes histidine, asparagine and alanine. May mediate amino acid transport in either direction under physiological conditions. May play a role in nitrogen metabolism and synaptic transmission.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG206515