

Product datasheet for **RG208294**

SLC5A12 (NM_178498) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC5A12 (NM_178498) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC5A12
Synonyms:	SMCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG208294 representing NM_178498
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGTGAAGAACTTTGCAGTTTGGGATTATGTTGATTTGCAGCCCTCTTTTCATTTCTCTGGAA
 TTGGGGTGTCTTTGCCATTAAGGAGAGAAAAAGGCAACTTCCCGAGAGTTCTCGGTTGGGGGAAGGCA
 AATGAGCTTTGGCCCTGTCGGCTTGTCTCTGACAGCCAGCTTCATGTCAGCTGTACGGTCTGGGGACC
 CTTCTGAAGTCTACCGCTTTGGGGCATCTTCTAGTCTTCTTCATTGCTTACCTATTTGTCATCTCT
 TAACATCAGAGCTCTTTCTCCCTGTGTTCTACAGATCTGGTATCACCAGCACTTATGAGTACTTACAAC
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 CACAATGTATTAGAGCAATCAACAAATGGATCTCGACTACATATATTTGACTTTGATGTAGATCCTCTCA
 GGCGACACACTTTTGGACTATCACAGTGGGAGGAACTTTACTTGGCTCGGAATCTATGGGGTCAATCA
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 CTGCTTACAGAACGGACTCAGAAGAGAAAGCCTGGTACATGTTCCAGGCTATGATCCTAAGGACAAAAG
 CTACAACAATATGGCATTGAGACTACCCATTTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG208294 representing NM_178498
 Red=Cloning site Green=Tags(s)

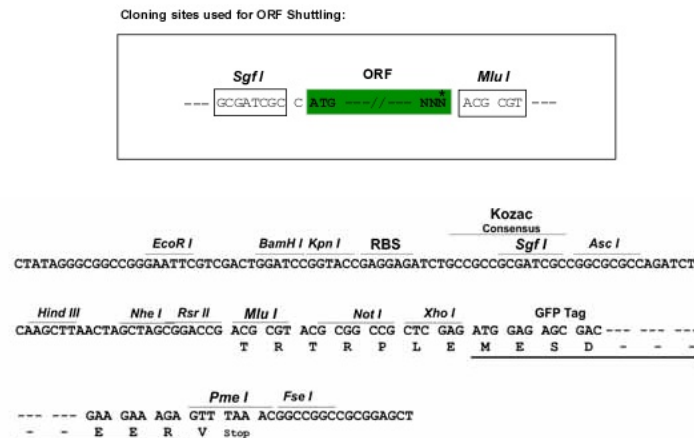
MEVKNFVWDYVVFVFAALFFISSGIGVFFAIKERKKATSREFLVGGRQMSFGPVGLSLTASFMSAVTVLGT
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 SSINALATVTFEDFVKSCPHLSDKLSTWISKGLCLLFGVMCTSMVAASVMGGVVQASLSIHGMCGGPM
 LGLFSLGIVFPFVNWKGALGGLLTGITLSFWVAIGAFIYPAPASKTWPLPLSTDQCISNVTATGPPVLS
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 VQHDSGTEQENLENGSARKQGAESVLQNLRLRESLVHVPGYDPKDKSYNNMAFETTHF

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_178498

ORF Size: 1854 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_178498.4](#)

RefSeq Size: 6253 bp

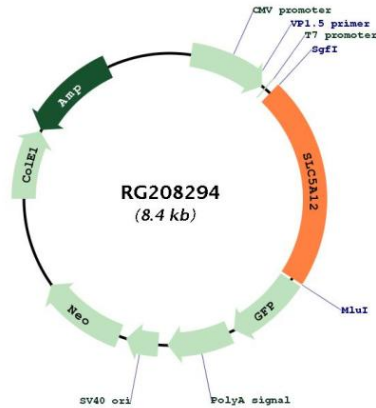
RefSeq ORF: 1857 bp

Locus ID: 159963

UniProt ID: [Q1EHB4](#)

Cytogenetics:	11p14.2
Protein Families:	Transmembrane
Gene Summary:	Normal blood lactate is maintained at about 1.5 mM, and little filtered lactate is excreted in urine. Reabsorption of lactate is mediated by the low-affinity Na(+)-coupled lactate transporter SLC5A12 in the initial part of the proximal tubule and by the high-affinity Na(+)-coupled lactate transporter SLC5A8 (MIM 608044) in the distal proximal tubule (Gopal et al., 2007 [PubMed 17692818]).[supplied by OMIM, Dec 2008]

Product images:



Circular map for RG208294