

Product datasheet for **RC208294**

SLC5A12 (NM_178498) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC5A12 (NM_178498) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC5A12
Synonyms:	SMCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC208294 representing NM_178498
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGAGGTGAAGAACTTTGCAGTTTGGGATTATGTTGATTTGCAGCCCTCTTTTCATTTCTCTGGAA
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 TAACATCAGAGCTCTTTCTCCCTGTGTTCTACAGATCTGGTATCACCAGCACTTATGAGTACTTACAAC
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 GTGGTGGTGTATGCTCCTGCCCTGGCACTCAATCAAGTACTGGGTTTGATCTCTGGGGCTGTGTTTG
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 CTACAACAATATGGCATTGAGACTACCCATTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208294 representing NM_178498
 Red=Cloning site Green=Tags(s)

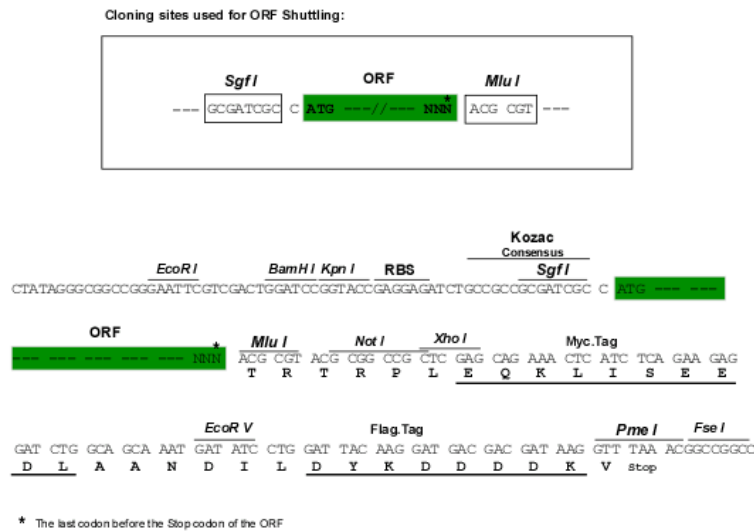
MEVKNFVWDYVVFVFAALFFISSGIGVFFAIKERKKATSREFLVGGRQMSFGPVGLSLTASFMSAVTVLGT
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 LGLWIIILVCAVFSGLIMYSHFKDCDPWTSGIISAPDQLMPYFVMEIFATMPGLPGLFVACAFSGTLSTVA
 SSINALATVTFEDFVKSCFPHLSDKLSTWISKGLCLLFGVMCTSMVAASVMGGVVQASLSIHGMC GGPM
 LGLFSLGIVFPFVNWKALGGLLTGITLSFWVAIGAFIYPAPASKTWPLPLSTDQCIKSNVTATGPPVLS
 SRPGIADTWYSISLYYSAVGCLGCIVAGVIIISLITGRQRGEDIQPLLIRPVCNLCFWSKKYKTLWCWG
 VQHDSGTEQENLENGSARKQGAESVLQNGLRRESLVHVPGYDPKDKSYNNMAFETTHF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8013_c12.zip

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.

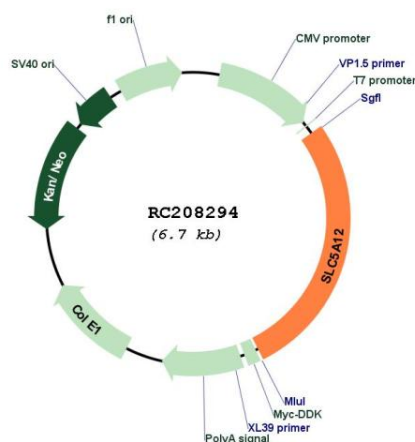
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_178498.4](#)

RefSeq Size: 6253 bp

RefSeq ORF:	1857 bp
Locus ID:	159963
UniProt ID:	Q1EHB4
Cytogenetics:	11p14.2
Protein Families:	Transmembrane
MW:	67.5 kDa
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 RC208294