

Product datasheet for **RC221312**

SGLT1 (SLC5A1) (NM_000343) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SGLT1 (SLC5A1) (NM_000343) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SGLT1
Synonyms:	D22S675; NAGT; SGLT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC221312 representing NM_000343
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACAGTAGCACCTGGAGCCCAAGACCACCGCGTCAACCGCCTGTTGAGACCCACGAGCTCATTC
GCAATGCAGCCGATATCTCCATCATCGTTATCTACTTCGTGGTAGTGATGGCCGTCGGACTGTGGGCTAT
GTTTTCCACCAATCGTGGGACTGTTGGAGGCTTCTTCTGGCAGGCCGAAGTATGGTGTGGTGGCCGATT
GGAGCCTCCCTCTTTGCTAGTAACATTGGAAGTGGCCACTTTGTGGGGCTGGCCGGGACTGGGGCAGCTT
CAGGCATCGCCATTGGAGGCTTTGAATGGAATGCCCTGGTTTTGGTGGTGTGCTGGGCTGGCTGTTTTGT
CCCCATCTATATTAAGGCTGGGGTGGTACAATGCCAGAGTACCTGAGGAAGCGGTTTGGAGGCCAGCGG
ATCCAGGTCTACCTTTCCCTTCTGTCCCTGCTGCTCTACATTTTACCAAGATCTCGGCAGACATCTTCT
CGGGGGCCATATTCATCAATCTGGCCTTAGGCCTGAATCTGTATTTAGCCATCTTCTCTTATTGGCAAT
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AAAAGTACATGAAAGCCATTCCAACCATAGTGTCTGATGGCAACACCACCTTTCAGGAAAAATGCTACAC
TCCAAGGGCCGACTCCTTCCACATCTTCCGAGATCCCCTCACGGGAGACCTCCCATGGCCTGGGTTTCATC
TTTGGGATGTCCATCCTTACCTTGTGGTACTGGTGACAGATCAGGTCATTGTGCAGCGCTGCCTCTCAG
CCAAGAATATGTCTCACGTGAAGGGTGGCTGCATCCTGTGTGGGTATCTAAAGCTGATGCCCATGTTTCAT
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TGTGAGAAATATTGCGGTACCAAGTTGGCTGTACCAACATCGCCTATCCAACCTTAGTGGTGGAGCTCA
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CCAGCAACTGTCCACGATTATCTGTGGGGTGCCTACTTGTACTTTGCCATTATCTCTTCGCCATTTCT
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CCTATTTTGTGGGCTAGAGCAGCACGGTGCACCAAGATGACTGAGGAAGAGGAGAAAGCCATGAAGATG
AAGATGACGGACACCTCTGAGAAGCCTTTGTGGAGGACAGTGTGAACGTCAATGGCATCATCTGGTGA
CCGTGGCTGTCTTTTGCATGCATATTTTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221312 representing NM_000343
Red=Cloning site Green=Tags(s)

MDSSTWSPKTTAVTRPVETHELIRNAADISIIVYFVVVMAVGLWAMFSTNRGTVGGFFLAGRSMVWVPI
 GASLFASNIGSGHFVGLAGTGAASGIAIGGFENALVLVVVLGWLFPVIYIKAGVVTMPPEYLRKRFGGQR
 IQVYLSLLSLLL YIFTKISADIFSGAIFINLALGLNLYLAIFLLLAITALYITITGGLAAVIYTDLTQTVI
 MLVGSILITGFAFHEVGGYDAFMEKYMKAIPTIVSDGNTTFQEKCYPRAFSFHIFRDPLTGDLPWPFGFI
 FGMSILTLWYWCTDQVIVQRCLSAKNMSHVKGGCILCGYLKLMMPMFMVMMPGMISRILYTEKIACVVPSE
 CEKYCGTKVGTNIAAYPTLVVELMPNGLRGLMLSVMLASLMSLSTSFNSASTLFTMDIYAKVRKASEK
 ELMIAGRLFILVLIGISIAWPIVQSAQSGQLFDYIQSITSYLGPPIAAVFLAIFWKRVPNEPGAFWGLI
 LGLLIGISRMITEFAYGTGSCMEPSNCPITICGVHLYFAIILFAISFITIVVISLLTKPIPDVHLYRCL
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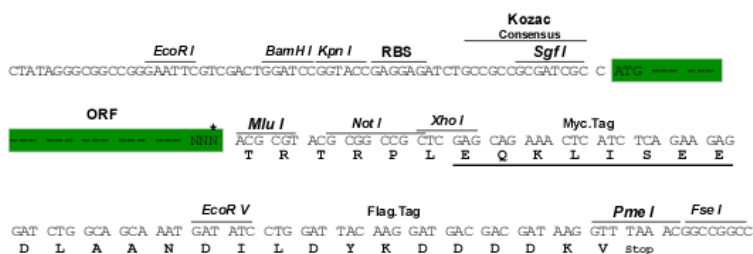
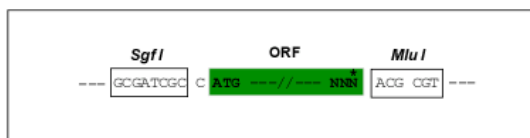
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6124_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000343

ORF Size: 1992 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_000343.4](#)

RefSeq Size: 2449 bp

RefSeq ORF: 1995 bp

Locus ID: 6523

UniProt ID: [P13866](#)

Cytogenetics: 22q12.3

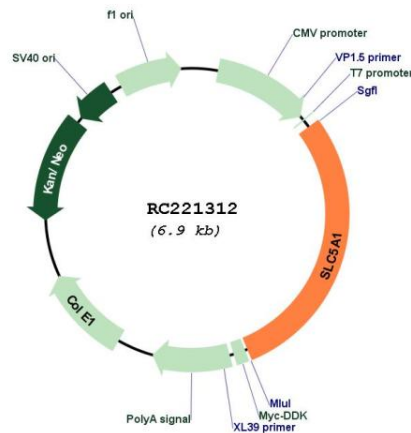
Domains: SSF

Protein Families: Druggable Genome, Transmembrane

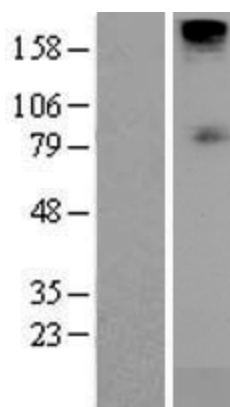
MW: 73.3 kDa

Gene Summary: This gene encodes a member of the sodium-dependent glucose transporter (SGLT) family. The encoded integral membrane protein is the primary mediator of dietary glucose and galactose uptake from the intestinal lumen. Mutations in this gene have been associated with glucose-galactose malabsorption. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RC221312



Western blot validation of overexpression lysate (Cat# [LY400126]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221312 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).