

## Product datasheet for **RG234457**

### SLC5A10 (NM\_001270648) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC5A10 (NM_001270648) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC5A10
Synonyms:	SGLT-5; SGLT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG234457 representing NM\_001270648  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGCAACTCCACCAGCGACTCCACACTCCCGGGACGAGCTGAGCGTGGCTGACATCATCGTCA  
 TCACTGTGATTTTGGCTGTAATGTGGCGTGGGCATATGGTCCTTGTGCGGGCCAGTAGGAACACGGT  
 GAATGGCTACTTCTGGCAGGCCGGGACATGACGTGGTGGCCGATTGGAGCCTCCCTCTTCGCCAGCAGC  
 GAGGGCTCTGGCCTCTTATTGGACTGGCGGGCTCAGGCGCGGCAGGAGGTCTGGCCGTGGCAGGCTTCG  
 AGTGGAAATGCCACGTACGTGCTGCTGGCACTGGCATGGGTGTTCTGTCGCCATCTACATCTCCTCAGAGAT  
 CGTCACCTTACCTGAGTACATTAGAAGCGCTACGGGGGCCAGCGGATCCGCATGTACCTGTCTGCTCTG  
 TCCCTGCTACTGTCTGTCTTACCAAGATATCGCTGGACCTGTACGCGGGGGCTCTGTTTGTGCACATCT  
 GCCTGGGTGGAACCTTACCTCTCCACCATCCTCAGCTCGGCATCACAGCCCTGTACACCATCGCAGC  
 TTTTGACCAGATCGGTGGTTACGGGCAGCTGGAGGCAGCTACGCCAGGCCATTCCCTCCAGGACCATT  
 GCCAACACCACCTGCCACCTGCCACGTACAGACGCCATGCACATGTTTCGAGACCCACACAGGGGACC  
 TGCCGTGGACCGGGATGACCTTTGGCCTGACCATCATGGCCACCTGGTACTGGTGCACCGACCAGGTGAT  
 CGTGCAGCGATCACTGTGAGCCCGGACCTGAACCATGCCAAGCGGGCTCCATCCTGGCCAGCTACCTC  
 AAGATGCTCCCATGGGCTGATCATATGCCGGGCATGATCAGCCGCGCATTGTTCCAGATGATGTGG  
 GCTGCGTGGTGGCGTCCGAGTGCCTGCGGGGCTGCGGGGCGGAGTGGCTGCTCCAACATCGCCTACCC  
 CAAGCTGGTCAATGAACTGATGCCCATCGGTCTGCGGGGGCTGATGATCGCAGTATGCTGGCGGCGCTC  
 ATGTCGTCGCTGACCTCCATCTTCAACAGCAGCAGCACCTCTTCACTATGGACATCTGGAGGCGGCTGC  
 GTCCCGCTCCGGCAGCGGGAGCTCCTGCTGGTGGGACGGCTGGTATAGTGGCACTCATCGGCGTGAG  
 GTGGCCTGGATCCCGCTCCTGCAGGACTCCAACAGCGGCAACTCTTCACTACATGCAGTCAGTGACC  
 AGCTCCCTGGCCCCACCAGTGACTGCAGTCTTGTCTGGCGTCTTCTGGCGACGTGCCAACGAGCAGG  
 GGGCCTTCTGGGGCTGATAGCAGGGCTGGTGGTGGGGGCCACGAGGCTGGTCTGGAATTCCTGAACCC  
 AGCCCCACCGTGCAGGAGCCAGACACGCGGCCAGCCGCTCTGGGGAGCATCCACTACCTGCACTTCGCT  
 GTCGCCCTCTTTCAGTCACTGAGTGGTGTGTTGTGGTGGCTGGAAGCCTGCTGACCCACCCACAGAGTG  
 TCCAGATTGAGAACCTTACCTGGTGGACCTGGCTCAGGATGTGCCCTTGGGAATAAAGCAGGTGATGG  
 CCAAACACCCAGAAACACGCCCTTCTGGGCCGTGTCTGTGGCTCAATGCCATCCTCCTCATGTGTGC  
 AACATATCTTTTATGCCTACTTCGCC

**ACGCGT**ACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG234457 representing NM\_001270648  
 Red=Cloning site Green=Tags(s)

MAANSTDLHTPGTQLSVADIIVITVYFALNVAVGIWSSCRASRNTVNGYFLAGRDMTWPIGASLFASS  
 EGSGLF IGLAGSGAAGGLAVAGFEWNATYVLLALAWVFVPIYISSEIVTLPEYIQKRYGGQRIRMYLSVL  
 SLLL SVFTKISLDLYAGALFVHICLGWNFYLSLITL GITALYIAAFDQIGGYGQLEAAYAQAIPSRIT  
 ANTTCHLPRDAMHMRDPHTGDL PWTGMTFGLTIMATWYWCTDQVIVQRSL SARDLNHAKAGSILASYL  
 KMLPMGLIIMPGMISRALFPDDVGCVPSECLRACGAEVGCSNIAYPKLVME LMP IGLRGLMIAVMLAAL  
 MSSLTSIFNSSSTLFTMDIWRRLRPRSGERELLLVGR LVI VALIGVSVAVIPVLQDSNSGQLFIYMQSVT  
 SSLAPPVTAVFVLGVFWRRANEQGAFWGLIAGL VVGATRLVLEFLNPAPPCGEPDTRPAVLGSIHYLHFA  
 VALFALSGAVVAGSLLTPPPQSVQIENLTWWT LAQDVPLGTKAGDGQTPQKHAFWARVCGFNAILLMCV  
 NIFFYAYFA

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001270648

**ORF Size:** 1707 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\\_001270648.2](#)

**RefSeq Size:** 2011 bp

**RefSeq ORF:** 1710 bp

**Locus ID:** 125206

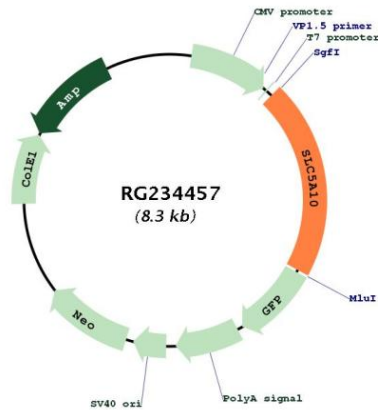
**UniProt ID:** [A0PJK1](#)

**Cytogenetics:** 17p11.2

**Protein Families:** Transmembrane

**Gene Summary:** This gene is a member of the sodium/glucose transporter family. Members of this family are sodium-dependent transporters and can be divided into two subfamilies based on sequence homology, one that co-transporters sugars and the second that transports molecules such as ascorbate, choline, iodide, lipoate, monocarboxylates, and pantothenate. The protein encoded by this gene has the highest affinity for mannose and has been reported to be most highly expressed in the kidney. This protein may function as a kidney-specific, sodium-dependent mannose and fructose co-transporter. Alternative splicing results in multiple transcript variants that encode different protein isoforms. [provided by RefSeq, Jul 2012]

**Product images:**



Circular map for RG234457