

## Product datasheet for **RG212374**

### SLC5A10 (NM\_001042450) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC5A10 (NM_001042450) 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:**

>RG212374 representing NM\_001042450  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGCAACTCCACCAGCGACTCCACACTCCCGGGACGAGCTGAGCGTGGCTGACATCATCGTCA  
 TCACTGTGATTTTGGCTGTAATGTGGCCGTGGGCATATGGTCCTTGTGCGGGCCAGTAGGAACACGGT  
 GAATGGCTACTTCTGGCAGGCCGGGACATGACGTGGTGGCCGATTGGAGCCTCCCTCTTCGCCAGCAGC  
 GAGGGCTCTGGCCTCTTATTGGACTGGCGGGCTCAGGCGCGGACAGGAGGTCTGGCCGTGGCAGGCTTCG  
 AGTGGAATGCCACGTACGTGCTGCTGGCACTGGCATGGGTGTTCTGTGCCATCTACATCTCCTCAGAGAT  
 CGTCACCTTACCTGAGTACATTAGAAGCGCTACGGGGGCCAGCGGATCCGCATGTACCTGTCTGCTCTG  
 TCCCTGCTACTGTCTGTCTTACCAAGATATCGCTGGACCTGTACGCGGGGGCTCTGTTTGTGCACATCT  
 GCCTGGGCTGGAACCTTACCTCTCCACCATCCTCAGCTCGGCATCACAGCCCTGTACACCATCGCAGG  
 GGGCCTGGCTGCTAATCTACACGGACGCCCTGCAGACGCTCATCATGGTGGTGGGGGCTGTCATCCTG  
 ACAATCAAAGCTTTTGACCAGATCGGTGGTTACGGGCAGCTGGAGGCAGCCTACGCCAGGCCATCCCT  
 CCAGGACCAATTGCCAACACCACCTGCCACCTGCCACGTACAGACGCCATGCACATGTTTCGAGACCCCA  
 CACAGGGGACCTGCCGTGGACCGGGATGACCTTTGGCCTGACCATCATGGCCACCTGGTACTGGTGCACC  
 GACCAGGTCACTGTCAGCGATCACTGTGAGCCGGGACCTGAACCATGCCAAGGCGGGCTCCATCCTGG  
 CCAGCTACCTCAAGATGCTCCCATGGGCTGATCATATGCCGGGATGATCAGCCGCGCATTGTTCCC  
 AGATGATGTGGGCTGCGTGGTGGCGTCCGAGTGCCTGCGGGCTGCGGGGCGAGGTGCGCTGCTCAAC  
 ATCGCTACCCCAAGCTGGTCAATGGAACCTGATGCCATCGGCTGCGGGGCTGATGATCGCAGTGTGTC  
 TGGCGGCGCTCATGTCGCTGACTCCATCTTCAACAGCAGCAGCACCCCTTCACTATGGACATCTG  
 GAGGCGGCTGCGTCCCGCTCCGGCAGCGGGAGCTCCTGCTGGTGGGACGGCTGGTCAATGTCGACTC  
 ATCGCGGTGAGTGTGGCCTGGATCCCGCTCCTGCAGGACTCCAACAGCGGCAACTTTCATCTACATGC  
 AGTCAGTGACCAGCTCCCTGGCCCCACCAGTACTGTCAGTCTTTGTCTGGGCGTCTTCTGGCGACGTGC  
 CAACGAGCAGGGGCTTCTGGGCTGATAGCAGGGCTGGTGGTGGGGCCACGAGGCTGGTCTGGAA  
 TTCCTGAACCCAGCCCCACCGTGCAGAGCCAGACACGCGGCCAGCCCTCCTGGGAGCATCCACTACC  
 TGCCTTCTGCTGCTGCTCTTTGCACTCAGTGGTGTGTTGTGGTGGCTGGAAGCTGCTGACCCACC  
 CCCACAGAGTGTCCAGATTGAGAACCTTACCTGGTGGACCCTGGCTCAGGATGTGCCCTTGGAACTAAA  
 GCAGGTGATGGCCAAACACCCAGAAACACGCCTTCTGGGCCGTGCTGTGGCTCAATGCCATCCTCC  
 TCATGTGTGCAACATATTCTTTATGCCTACTTCGCC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG212374 representing NM\_001042450  
 Red=Cloning site Green=Tags(s)

MAANSTDLHTPGTQLSVADIIVITVYFALNVAVGIWSSCRASRNTVNGYFLAGRDMTWPIGASLFASS  
 EGSGLFIGLAGSGAAGGLAVAGFEWNATYVLLALAWFVPIYISSEIVTLPEYIQKRYGGQRIRMYLSVL  
 SLLL SVFTKISLDLYAGALFVHICLGNWFYLSLITLGTALYTIAGGLAAVIYTDALQTLIMVVGAVIL  
 TIKAFDQIGGYQLEAAYAQAIPSRTIANTTCHLPRTDAMHMRDPHTGDL PWTGMTFGLTIMATWYWCT  
 DQVIVQRSLSARDLNHAKAGSILASYLKMLPMGLIIMPGMISRALFPDDVGCVPSECLRACGAEVGCSN  
 IAYPKLVMELMPIGLRGLMIAVMLAALMSSLTSIFNSSSTLFTMDIWRRLRPRSGERELLLVGRLLIVAL  
 IGVSVAWIPVLQDSNSQLFIYMQSVTSSLAPPVAVFVLGVFWRRANEQGAFWGLIAGLVV GATRLVLE  
 FLNPAPPCEPDTRPAVLGSIHYLHFAVALFALSGAVVAVAGSLLTPPPQSVQIENLTWWTLAQDVPLGK  
 AGDGQTPQKHAFWARVCGFNAILLMCVNIFFYAYFA

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

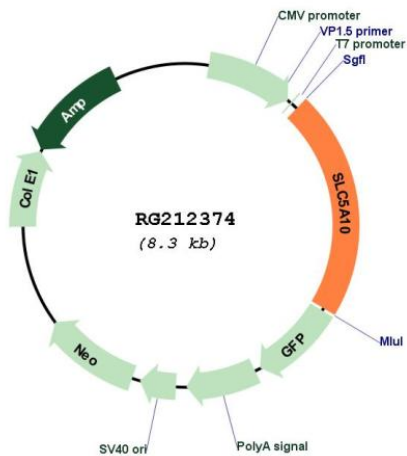
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_001042450

ORF Size: 1788 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<p><a href="#">NM_001042450.4</a></p>
<b>RefSeq Size:</b>	<p>2092 bp</p>
<b>RefSeq ORF:</b>	<p>1791 bp</p>
<b>Locus ID:</b>	<p>125206</p>
<b>UniProt ID:</b>	<p><a href="#">A0PJK1</a></p>
<b>Cytogenetics:</b>	<p>17p11.2</p>
<b>Protein Families:</b>	<p>Transmembrane</p>
<b>Gene Summary:</b>	<p>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-transport 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]</p>