

## Product datasheet for **RG224822**

### **SGLT2 (SLC5A2) (NM\_003041) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SGLT2 (SLC5A2) (NM_003041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC5A2
Synonyms:	SGLT2
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>RG224822 representing NM\_003041  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

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ACCTCAATGCCCTGCTCATGATGGCAGTGGCCGTGTTCTCTGGGGCTTCTATGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG224822 representing NM\_003041  
 Red=Cloning site Green=Tags(s)

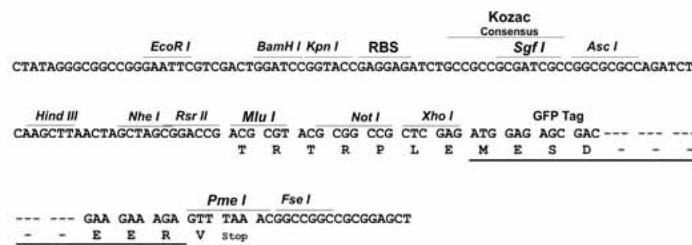
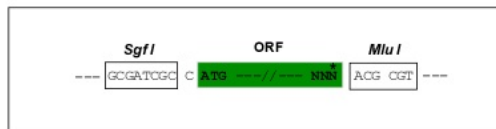
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TRTRPLE - GFP Tag - V

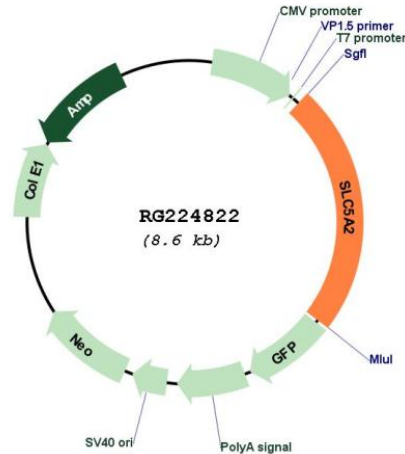
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_003041

ORF Size: 2016 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\\_003041.4](#)

RefSeq Size: 2271 bp

RefSeq ORF: 2019 bp

Locus ID: 6524

UniProt ID: [P31639](#)

Cytogenetics: 16p11.2

Protein Families: Transmembrane

**Gene Summary:** This gene encodes a member of the sodium glucose cotransporter family which are sodium-dependent glucose transport proteins. The encoded protein is the major cotransporter involved in glucose reabsorption in the kidney. Mutations in this gene are associated with renal glucosuria. Two transcript variants, one protein-coding and one not, have been found for this gene. [provided by RefSeq, Feb 2015]