

Product datasheet for **RG221262**

SLC2A2 (NM_000340) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC2A2 (NM_000340) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC2A2
Synonyms:	GLUT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG221262 representing NM_000340
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACAGAAGATAAGGTCACTGGGACCCTGGTTTTCACTGTCATCACTGCTGTGCTGGGTTCTTCCAGT
 TTGGATATGACATTGGTGTGATCAATGCACCTCAACAGGTAATAATATCTCACTATAGACATGTTTTGGG
 GTTCCACTGGATGACCGAAAAGCTATCAACAACCTATGTTATCAACAGTACAGATGAACTGCCACAATC
 TCATACTCAATGAACCCAAAACCAACCCCTTGGGCTGAGGAAGAGACTGTGGCAGCTGCTCAACTAATCA
 CCATGCTCTGGTCCCTGTCTGTATCCAGCTTTCAGTTGGTGGAAATGACTGCATCATTCTTTGGTGGGTG
 GCTTGGGGACACACTTGGAGAATCAAAGCCATGTTAGTAGCAAACATTCTGTCATTAGTTGGAGCTCTC
 TTGATGGGTTTTCAAATTTGGGACCATCTCATATACTTATAATTGCTGGAAGAAGCATATCAGGACTAT
 ATTGTGGGCTAATTTAGGCCTGGTTCCTATGTATATCGGTGAAATTGCTCAACCGCTCTCAGGGGAGC
 ACTTGGCACTTTTCATCAGCTGGCCATCGTCACGGGCATTCTTATTAGTCAGATTATTGGTCTTGAATTT
 ATCTTGGCAATTATGATCTGTGGCACATCCTGCTTGGCCTGTCTGGTGTGCGAGCCATCCTTCAGTCTC
 TGCTACTCTTTTTCTGTCCAGAAAGCCCGAGATACCTTTACATCAAGTTAGATGAGGAAGTCAAAGCAAA
 ACAAAGCTTAAAAGACTCAGAGGATATGATGATGTACCAAAGATATTAATGAAATGAGAAAAGAAAGA
 GAAGAAGCATCGAGTGAGCAGAAAGTCTCTATAATTCAGCTCTTACCAATTCCAGCTACCGACAGCCTA
 TTCTAGTGGCACTGATGCTGCATGTGGCTCAGCAATTTCCGGAATCAATGGCATTTTTTACTACTCAAC
 CAGCATTTTTAGACGGCTGGTATCAGCAAACCTGTTTATGCAACCATTGGAGTTGGCGCTGTAACATG
 GTTTTCACTGCTGTCTGTATTCCTTGTGGAGAAGGCAGGGCGACGTTCTCTTTCTAATTGGAATGA
 GTGGATGTTTTGTTGTGCCATCTTCATGTCAGTGGGACTGTGCTGCTGAATAAGTTCTCTTGGATGAG
 TTATGTAGCATGATAGCCATCTTCTCTTTGTGACGTTCTTTGAAATTGGGCCAGGCCCGATCCCTGG
 TTCATGGTGGCTGAGTTTTTTCAGTCAAGGACCAGTCCTGCTGCTTTAGCAATAGCTGCATTTCAGCAATT
 GGACCTGCAATTTCAATTGAGCTCTGTGTTCCAGTACATTGCGGACTTCTGTGGACCTTATGTGTTTTT
 CCTTTTGTGGAGTGTCTGCTGCTTTACCCTGTTTACATTTTTTAAAGTTCCAGAAACCAAAGGAAAG
 TCTTTTGGAGAAATTGCTGCAGAATCCAAAAGAAGAGTGGCTCAGCCCCAGGCCAAAAGCTGCTGTAG
 AAATGAAATTCCTAGGAGCTACAGAGACTGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG221262 representing NM_000340
 Red=Cloning site Green=Tags(s)

MTEDKVTGTLVFTVITAVLGSFQFGYDIGVINAPQQVVIISHYRHVLGVPLDDRKAINNYVINSTDELPTI
 SYSMNPKPTPWAEETVAAAQLITMLWSLSVSSFAVGGMTASFFGGWLGDTLGRKAMLVANILSLVGAL
 LMGFSLKLP SHILIIAGRSISGLYCGLISGLVPMYIGEIAPTALRGALGTFHQLAIVTGILISQIIGLEF
 ILGNYDLWHILLGLSGVRAILQSLLLFFCPESPRYLYIKLDEEVKAKQSLKRLRGYDDVTKDINEMRKER
 EEASSEQKVSIIQLFTNSSYRQPILVALMLHVAQQFSGINGIFYYSTSIFQTAGISKPVYATIGVGAVNM
 VFTAVSVFLVEKAGRRSLFLIGMSGMFVCAIFMSVGLVLLNKFWSMSYVSMIAIFLVSFFEIGPPIPW
 FMVAEFFSQGPRPAALAAAFSNWTCNFIVALCFQYIADFQYVFFLFAVLLAFTLFTFFKVPETKKG
 SFEEIAAEFQKKSAGHRPKAAVEMKFLGATETV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000340

ORF Size: 1572 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

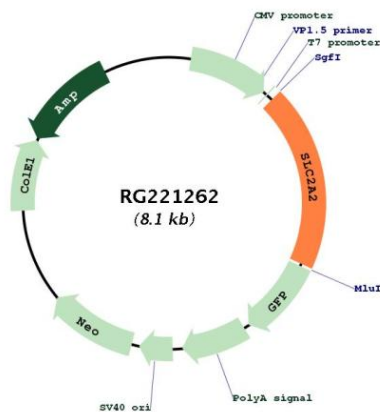
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_000340.2](#)

RefSeq Size: 3439 bp
RefSeq ORF: 1575 bp
Locus ID: 6514
UniProt ID: [P11168](#)
Cytogenetics: 3q26.2
Domains: sugar_tr
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways: Maturity onset diabetes of the young, Type II diabetes mellitus
Gene Summary: This gene encodes an integral plasma membrane glycoprotein of the liver, islet beta cells, intestine, and kidney epithelium. The encoded protein mediates facilitated bidirectional glucose transport. Because of its low affinity for glucose, it has been suggested as a glucose sensor. Mutations in this gene are associated with susceptibility to diseases, including Fanconi-Bickel syndrome and noninsulin-dependent diabetes mellitus (NIDDM). Alternative splicing results in multiple transcript variants of this gene. [provided by RefSeq, Jul 2013]

Product images:


Circular map for RG221262