

Product datasheet for **RG222696**

Glucose Transporter GLUT1 (SLC2A1) (NM_006516) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glucose Transporter GLUT1 (SLC2A1) (NM_006516) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Glucose Transporter GLUT1
Synonyms:	CSE; DYT9; DYT17; DYT18; EIG12; GLUT; GLUT-1; GLUT1; GLUT1DS; HTLVR; PED; SDCHCN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG222696 representing NM_006516
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGCCAGCAGCAAGAAGCTGACGGGTGCGCTCATGTGGCCGTGGGAGGAGCAGTGCTTGGCTCCC
 TGCAGTTTGGCTACAACACTGGAGTCATCAATGCCCCCAAGAAGGTGATCGAGGAGTTCTACAACCAGAC
 ATGGGTCCACCGCTATGGGGAGAGCATCCTGCCACCACGCTCACCACGCTCTGGTCCCTCTCAGTGGCC
 ATCTTTTCTGTTGGGGCATGATTGGCTCCTTCTCTGTGGGCCTTTTCGTTAACCCTTTGGCCGGCGGA
 ATTCAATGCTGATGATGAACCTGCTGGCCTTCGTGTCCGCGTGCTCATGGGCTTCTCGAACTGGGCAA
 GTCCTTTGAGATGCTGATCCTGGGCCGCTTCATCATCGGTGTGTACTGCGGCCTGACCACAGGCTTCGTG
 CCCATGTATGTGGGTGAAGTGTACCCACAGCCCTTCGTGGGGCCCTGGGCACCCTGCACCAGCTGGGCA
 TCGTCGTGGCATCCTCATCGCCAGGTGTTCCGCTGGACTCCATCATGGGCAACAAGGACCTGTGGCC
 CCTGCTGTGAGCATCATCTTCATCCCGCCCTGCTGCAGTGCATCGTGTGCCCTTCTGCCCGAGAGT
 CCCCGTTCCTGCTCATCAACCGCAACGAGGAGAACCAGGCAAGAGTGTCTAAAGAAGCTGCGCGGGA
 CAGCTGACGTGACCCATGACCTGACAGGAGATGAAGGAAGAGAGTGGCAGATGATGCGGGAGAAGAAGT
 CACCATCCTGGAGCTGTTCCGCTCCCCCGCTACCGCCAGCCATCCTCATCGTGTGGTGTGACGCTG
 TCCCAGCAGCTGTCTGGCATCAACGCTGTCTTCTATTACTCCACGAGCATCTTCGAGAAGGCGGGGTGC
 AGCAGCCTGTGTATGCCACCATTTGGCTCCGGTATCGTCAACACGGCCTTCACTGTCGTGTGCTGTTTGT
 GGTGGAGCGAGCAGGCCGGGACCCTGCACCTCATAGGCCTCGTGGCATGGCGGGTGTGCCATACTC
 ATGACCATCGCGCTAGCACTGCTGGAGCAGTACCCTGGATGTCCTATCTGAGCATCGTGGCCATCTTTG
 GCTTTGTGGCCTCTTTGAAGTGGTCTTGCCCATCCCATGGTTCATCGTGGCTGAACCTTTCAGCCA
 GGGTCCACGTCCAGTGCATTGCCGTTGCAGGCTTCTCCAAGTGGACCTCAAATTTCAATTGTGGGCATG
 TGCTTCCAGTATGTGGAGCAACTGTGTGGTCCCTACGTCTTCATCATCTTCACTGTGCTCCTGGTCTGT
 TCTTTCATCTTACCTACTTCAAAGTTCCTGAGACTAAAGGCCGACCTTCGATGAGATCGCTTCCGGCTT
 CCGGCAGGGGGAGCCAGCCAAAGTGACAAGACACCCGAGGAGCTGTTCCATCCCCTGGGGCTGATTCC
 CAAGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG222696 representing NM_006516
 Red=Cloning site Green=Tags(s)

MEPSSKLTGRLMLAVGGAVLGSLLQFYNTGVINAPQKVIIEEFYNQTWVHRYGESILPTTLTTLWLSVA
 IFSVGGMIGSFSVGLFVNRFGRRNSMLMMNLLAFVSAVLMGF SKLGKSFEMILILGRFIIIGVYCGLTGTFV
 PMYVGEVSPTALRGALGTLHQLGIVVGIILIAQVFLDSIMGKDLWPLLLSIIIFIPALLQCIVLPFCPES
 PRFLLINRNEENRAKSVLKKLRGTADVTHDLQEMKEESRQMMREKKVTILELFRSPAYRQPILIAVVLQL
 SQQLSGINAVFYSTSI FEKAGVQPVYATIGSGIVNTAFTVVSFLVVERAGRRTLHLIGLAGMAGCAIL
 MTIALALLEQLPWMSYLSIVAIFGFVAFVEVGPPIPWFIVAELFSQGPRPAAIAVAGFSNWSNFIVGM
 CFQYVEQLCGPYVFIIFTVLLVLFIFTYFKVPETKGRTFDEIASGFRQGASQSDKTPEELFHPLGADS
 QV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_006516

ORF Size: 1476 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_006516.4](#)

RefSeq Size: 2856 bp

RefSeq ORF: 1479 bp

Locus ID: 6513

UniProt ID: [P11166](#)

Cytogenetics: 1p34.2

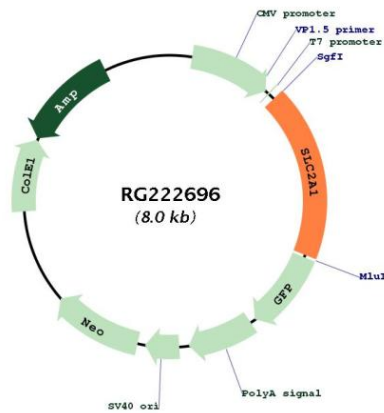
Domains: sugar_tr

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: Adipocytokine signaling pathway, Pathways in cancer, Renal cell carcinoma

Gene Summary: This gene encodes a major glucose transporter in the mammalian blood-brain barrier. The encoded protein is found primarily in the cell membrane and on the cell surface, where it can also function as a receptor for human T-cell leukemia virus (HTLV) I and II. Mutations in this gene have been found in a family with paroxysmal exertion-induced dyskinesia. [provided by RefSeq, Apr 2013]

Product images:



Circular map for RG222696