*m*GLUT4 VersaClone cDNA

Catalog Number: RDC0996

Specifications:

Gene:	*m*Slc2a4
Accession:	NP_033230
Insert size:	1543bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

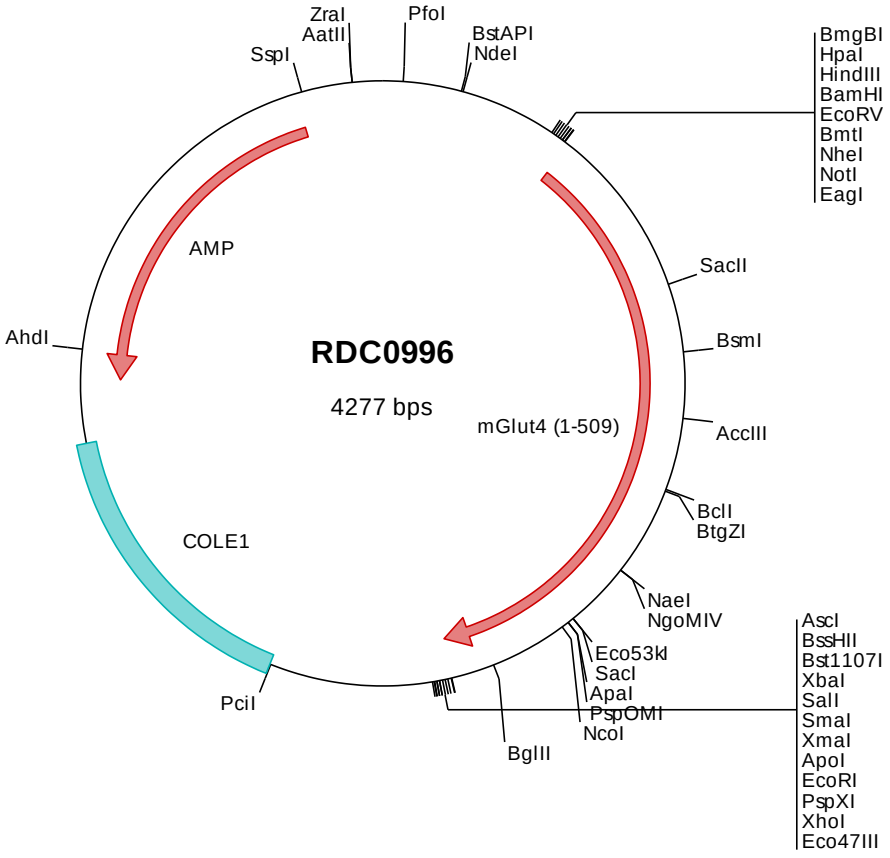
*m*GLUT4 cDNA Plasmid

Slc2a4 solute carrier family 2 (facilitated glucose transporter), member 4 [*Mus musculus* (house mouse)]

Also known as: Glut4; Glut-4

Summary:

GLUT4 is a multi-pass membrane protein belonging to the glucose transporter subfamily. It is an insulin-regulated glucose transporter responsible for glucose uptake. In the absence of insulin, this integral membrane protein is sequestered within the cells of muscle and adipose tissue. Minutes after insulin stimulation, the protein moves to the cell surface and begins to transport glucose across the cell membrane. Mutations in GLUT4 have been associated with noninsulin-dependent diabetes mellitus (NIDDM).



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC0996 Plasmid DNA Sequence

```
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 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgccgtcgg gtttccagca gatcggctct gacgatgggg aacccccctcg
 501  gcagcgagtg actggaacac tggtcctagc tgtattctca gctgtgcttg gctcccttca gtttggctat aacattgggg ttatcaatgc cccacagaag
 601  gtgattgaac agagctacaa tgcaacgtgg ctgggtaggc aaggtcctgg gggaccggat tccatcccac aaggcaccct cactacgctc tgggctctct
 701  ccgtggccat cttctctgtg ggtggcatga tctcttcctt tctcattggc atcatttctc aatggttggg aaggaaaagg gctatgctgg ccaacaatgt
 801  cttggccgtg ttgggggggcg ccctcatggg cctagccaat gccgcggcct cctatgagat actcattctt ggacggttcc tcattggcgc ctactcaggg
 901  ctaacatcag ggctggtgcc catgtatgtg ggagaaatcg cccccactca tcttcggggt gccttgggaa cactcaacca actggccatc gtcattggca
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1301  accggcagcc tctgatcatc gcagtggtgc tgcagctgag ccaacagctc tcaggcatca atgctgtttt ctactattca accagcatct tcgagtcggc
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1701  agccgccatg gctgtcgctg gtttctccaa ctggacctgt aacttcattg tcggcatggg tttccagtat gttgcggatg ctatgggtcc ttacgtcttc
1801  cttctatttg ccgtcctcct gcttggcttc ttcatcttca ccttcctaaa agtgcctgaa accagaggcc ggacgtttga ccagatctca gctgccttcc
1901  gacggacacc ttccctttta gagcaggagg tgaaacccag tacagaactt gaatactaag ggccagatga gaatgactaa aggcgcgcca gtatactcta
2001  gagtcgacac ccggggaatt cctcgagcgc tcgtctctag cttggcgtaa tcatggtcat agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc
2101  acacaacata cgagccggaa gcataaagtg taaagcctgg ggtgcctaat gagtgagcta actcacatta attgcgttgc gctcactgcc cgctttccag
2201  tcgggaaacc tgtcgtgcca gctgcattaa tgaatcggcc aacgcgcggg gagaggcggt ttgcgtattg ggcgctcttc cgcttcctcg ctcactgact
2301  cgctgcgctc ggtcgttcgg ctgcggcgag cggtatcagc tcactcaaag gcggtaatac ggttatccac agaatcaggg gataacgcag gaaagaacat
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> RDC0996 Translated Insert Sequence

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 201  lwplllaltv lpallqlill pfcpespryl yiirnlegpa rkslkrltgw advsdalael kdekrklere rpmsllqllg srthrqplii avvlqlsqql
 301  sginavfyys tsifesagvg qpayatigag vvntvftlvs vllveragrr tlhllglagm cgcailmtva llllervpam syvsivaifg fvaffeigpg
 401  pipwfivael fsqgprpaam avagfsnwtc nfivgmgfqy vadamgpyvf llfavlllgf fiftflkvpe trgrtfdqis aafrrtpsll eqevkpstel
 501  eylgpdend
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