*h*GLUT2 VersaClone cDNA

Catalog Number: RDC0129

Specifications:

Gene:	*h*GLUT2
Accession:	NP_000331
Insert size:	1588bp
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

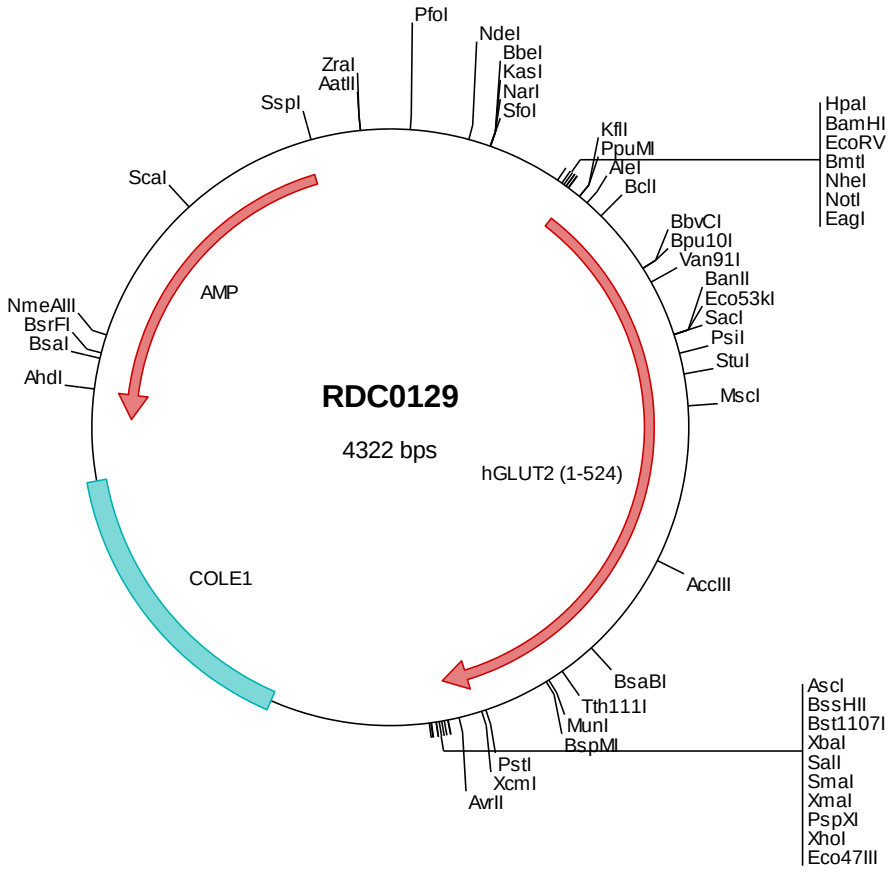
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*GLUT2 cDNA Plasmid

SLC2A2 solute carrier family 2 (facilitated glucose transporter), member 2 [*Homo sapiens*]

Also known as: GLUT2

Summary:
GLUT2 is a multi-pass membrane protein belonging to the glucose transporter subfamily. GLUT2 is expressed in the liver, islet beta cells, intestine, and kidney epithelium. It is expressed six fold higher in microvilli facing adjacent endocrine cells than it is in other areas of the plasma membrane. It has a low affinity for glucose and mediates glucose transport. GLUT2 plays a role in glucose sensing by insulin-producing beta cells of the pancreatic islets.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC0129 Plasmid DNA Sequence

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   1  tcgcgcgttt cggtgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 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 atgacagaag ataaggtcac tgggaccctg gttttcactg tcatcactgc
 501  tgtgctgggt tccttccagt ttggatatga cattggtgtg atcaatgcac ctcaacaggt aataatatct cactatagac atgttttggg tgttccactg
 601  gatgaccgaa aagctatcaa caactatgtt atcaacagta cagatgaact gcccacaatc tcatactcaa tgaacccaaa accaacccct tgggctgagg
 701  aagagactgt ggcagctgct caactaatca ccatgctctg gtccctgtct gtatccagct ttgcagttgg tggaatgact gcatcattct ttggtgggtg
 801  gcttggggac acacttggaa gaatcaaagc catgttagta gcaaacattc tgtcattagt tggagctctc ttgatggggt tttcaaaatt gggaccatct
 901  catatactta taattgctgg aagaagcata tcaggactat attgtgggct aatttcaggc ctggttccta tgtatatcgg tgaaattgct ccaaccgctc
1001  tcaggggagc acttggcact tttcatcagc tggccatcgt cacgggcatt cttattagtc agattattgg tcttgaattt atcttgggca attatgatct
1101  gtggcacatc ctgcttggcc tgtctggtgt gcgagccatc cttcagtctc tgctactctt tttctgtcca gaaagcccca gataccttta catcaagtta
1201  gatgaggaag tcaaagcaaa acaaagcttg aaaagactca gaggatatga tgatgtcacc aaagatatta atgaaatgag aaaagaaaga gaagaagcat
1301  cgagtgagca gaaagtctct ataattcagc tcttcaccaa ttccagctac cgacagccta ttctagtggc actgatgctg catgtggctc agcaattttc
1401  cggaatcaat ggcatttttt actactcaac cagcattttt cagacggctg gtatcagcaa acctgtttat gcaaccattg gagttggcgc tgtaaacatg
1501  gttttcactg ctgtctctgt attccttgtg gagaaggcag ggcgacgttc tctctttcta attggaatga gtgggatgtt tgtttgtgcc atcttcatgt
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1701  gatcccctgg ttcatggtgg ctgagttttt cagtcaagga ccacgtcctg ctgctttagc aatagctgca ttcagcaatt ggacctgcaa tttcattgta
1801  gctctgtgtt tccagtacat tgcggacttc tgtggacctt atgtgttttt cctctttgct ggagtgctcc tggcctttac cctgttcaca ttttttaaag
1901  ttccagaaac caaaggaaag tcttttgagg aaattgctgc agaattccaa aagaagagtg gctcagccca caggccaaaa gctgctgtag aaatgaaatt
2001  cctaggagct acagagactg tgtaaaggcg cgccagtata ctctagagtc gacacccggg gaattcctcg agcgctcgtc tctagcttgg cgtaatcatg
2101  gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg
2201  agctaactca cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaacctgtcg tgccagctgc attaatgaat cggccaacgc gcggggagag
2301  gcggtttgcg tattgggcgc tcttccgctt cctcgctcac tgactcgctg cgctcggtcg ttcggctgcg gcgagcggta tcagctcact caaaggcggt
2401  aatacggtta tccacagaat caggggataa cgcaggaaag aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg
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2801  aactatcgtc ttgagtccaa cccggtaaga cacgacttat cgccactggc agcagccact ggtaacagga ttagcagagc gaggtatgta ggcggtgcta
2901  cagagttctt gaagtggtgg cctaactacg gctacactag aaggacagta tttggtatct gcgctctgct gaagccagtt accttcggaa aaagagttgg
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3701  ccgatcgttg tcagaagtaa gttggccgca gtgttatcac tcatggttat ggcagcactg cataattctc ttactgtcat gccatccgta agatgctttt
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4201  gaaaaataaa caaatagggg ttccgcgcac atttccccga aaagtgccac ctgacgtcta agaaaccatt attatcatga cattaaccta taaaaatagg
4301  cgtatcacga ggccctttcg tc
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> RDC0129 Translated Insert Sequence

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 101  vssfavggmt asffggwlgd tlgrikamlv anilslvgal lmgfsklgps hiliiagrsi sglycglisg lvpmyigeia ptalrgalgt fhqlaivtgi
 201  lisqiiglef ilgnydlwhi llglsgvrai lqslllffcp esprylyikl deevkakqsl krlrgyddvt kdinemrker eeasseqkvs iiqlftnssy
 301  rqpilvalml hvaqqfsgin gifyystsif qtagiskpvy atigvgavnm vftavsvflv ekagrrslfl igmsgmfvca ifmsvglvll nkfswmsyvs
 401  miaiflfvsf feigpgpipw fmvaeffsqg prpaalaiaa fsnwtcnfiv alcfqyiadf cgpyvfflfa gvllaftlft ffkvpetkgk sfeeiaaefq
 501  kksgsahrpk aavemkflga tetv
```