

Product datasheet for **RR213355**

Gck (NM_012565) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gck (NM_012565) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gck
Synonyms:	GLK; GLUKA; RNGK2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR213355 representing NM_012565
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTATGGATACTACAAGGTGTGGAGCCAGTTGTTGACTCTGGTCGAGCAGATCCTGGCAGAGTTCC
 AGCTGCAGGAGGAAGACCTGAAGAAGGTGATGACCCGGATGCAGAAGGAGATGGACCGTGGCCTGAGGCT
 GGAGACCCACGAGGAGGCCAGTGTAAAGATGTTACCCACCTACGTGCGTTCCACCCAGAAAGGCTCAGAA
 GTCGGAGACTTTCTCCTTAGACCTGGGAGGAACCAACTTCAGAGTGTGCTGGTCAAAGTGGGAGAGG
 GGGAGGCAGGGCAGTGGAGCGTGAAGACAAAACACCAGATGACTCCATCCCCGAGGACGCCATGACGGG
 CACTGCCGAGATGCTCTTTGACTACATCTCTGAATGCATCTCTGACTTCTTGACAAGCATCAGATGAAG
 CACAAGAACTGCCCTGGGCTTCACTTCTCCTTCCCTGTGAGGCACGAAGACCTAGACAAGGGCATCC
 TCCTCAATTGGACCAAGGGCTTCAAGGCCTCTGGAGCAGAAGGGAACAACATCGTAGGACTTCTCCGAGA
 TGCTATCAAGAGGAGAGGGGACTTTGAGATGGATGTGGTGGCAATGGTGAACGACACAGTGGCCACAATG
 ATCTCCTGCTACTATGAAGACCCCAATGTGAGGTCGGCATGATTGTGGGCACTGGCTGCAATGCCTGCT
 ACATGGAGGAAATGCAGAATGTGGAGCTGGTGGAAAGGGATGAGGGACGCATGTGCGTCAACACGGAGTG
 GGGCGCCTTCGGGACTCGGGCGAGCTGGATGAGTTTCTACTGGAGTATGACCCGATGGTGGATGAAAGC
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 TGGTGCCTTTGAGACCCGTTTCGTGTACAAGTGGAGAGCGACTCCGGGGACCGAAAGCAGATCCACAAC
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 TGTCCTACTCGCGCCCATATGTGCTCCGACGACTAGCTGGGGTCAATAATCGCATGCGCGAAAGCCG
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 GAGCGGTTTACGCCAGTGTGCCAGGCTGACACCCAAGTGCAGAAATCACCTTATCGAATCAGAGGAGG
 GCAGCGCAGGGGAGCCGCGCTGGTCTCTGCGGTGGCCTGCAAGAAGGCTTGCATGCTGGCCAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR213355 representing NM_012565
 Red=Cloning site Green=Tags(s)

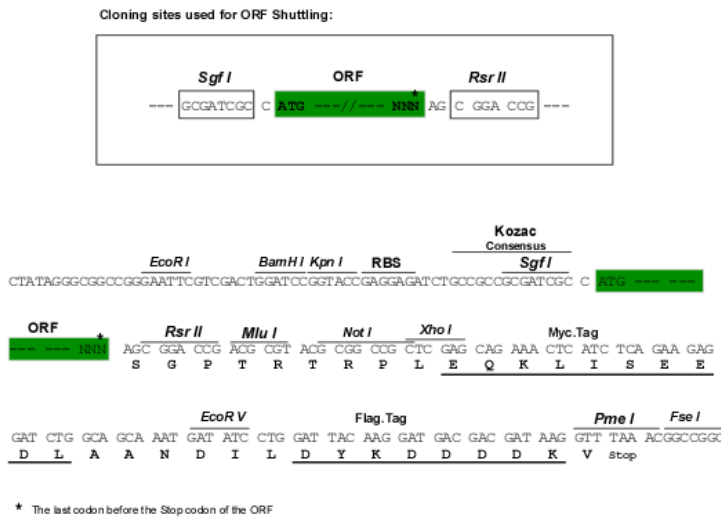
MAMDTTRCGAQLLTLVEQILAEFQLQEEDLKKVMSRMQKEMDRGLRLETHEEASVKMLPTYVVRSTPEGSE
 VGDFLSLDLGGTNFRVMLVKVGEAGEQWSVKTKHQMYSIPEDAMTGAEMLFDYISECISDFLDKHQMK
 HKKLPLGFTTFSPVRHEDLDKGI LLNWTGFKASGAEGNNIVGLLRDAIKRRGDFEMDVVAMVNDTVATM
 ISCYEDRQCEVGMIVGTGCNACYMEEMQNVELVEGDEGRMCVNTEWGAFGDSGELDEFLLLEYDRMVDES
 SANPGQQLYEKIIIGGKYMGE LVRLVLLKLVDENLLFHGEASEQLRTRGAFETRFVSQVESDSGDRKQIHN
 ILSTLGLRPSVTDCDIVRRACESVSTRAAHMCSAGLAGVINRMRESRSEDVMRITVGVDSVYKLPSPFK
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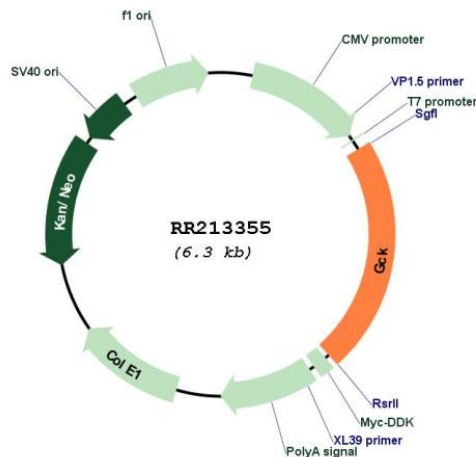
Restriction Sites:

SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_012565

ORF Size: 1395 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_012565.2](#), [NP_036697.1](#)

RefSeq Size: 2343 bp

RefSeq ORF: 1398 bp

Locus ID: 24385

UniProt ID: [P17712](#)

Cytogenetics: 14q21

MW: 51.9 kDa

Gene Summary: catalyzes the conversion of ATP and D-glucose to ADP and D-glucose 6-phosphate; may mediate glucosensing in glucose-inhibited and glucose-excited neurons [RGD, Feb 2006]