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Product datasheet for MC217940

Gck (BC011139) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gck (BC011139) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gck
Synonyms:	GLK, Gk, HK4, HKIV, HXKP, MODY2, NIDDM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>BC011139
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGTGGATACTACAAGGAGGGGAGCCCAGTCGTTGACTCTGGTAGAGCAGATCCTGGCAGAGTTCC
AGCTGCAGGAGGAAGACCTGAAGAAGGTGATGAGCCGGATGCAGAAGGAGATGGACCGTGGCCTGAAGCT
GGAGACCCATCAGGAGGCCAGTGTAAAGATGTTGCCCACCTACGTGCGTTCCACCCCAGAAGGCTCAGAA
GTTGGAGACTTTCTCTCCTTAGACCTGGGAGGAACCAACTTCAGGGTGATGCTGGTGAAAGTGGGGGAGG
GGGAGGCAGGACAGTGGAGCGTGAAGACGAAACACCAGATGTATTCCATCCCCGAGGACGCCATGACGGG
CACTGCGGAGATGCTCTTTGACTACATCTCTGAGTGCATCTCTGACTTCCTGGACAAGCATCAGATGAAA
CACAAGAAACTACCCCTGGGCTTCACCTTCTCCTTCCCTGTAAGGCACGAAGACATAGACAAGGGCATCC
TGCTCAACTGGACCAAGGGCTTCAAGGCCTCCGGAGCAGAAGGGAACAACATCGTGGGACTTCTCCGAGA
TGCTATCAAGAGGAGAGGGGACTTTGAGATGGATGTGGTGGCAATGGTGAATGACACGGTGGCCACAATG
ATCTCCTGCTACTATGAAGACCGCCAATGTGAGGTCGGCATGATTGTGGGCACCGGCTGCAACGCCTGCT
ACATGGAGGAGATGCAGAATGTGGAGCTGGTGGAAGGCGATGAGGGGCGCATGTGTGTCAACACAGAGTG
GGGCGCCTTCGGGAACTCCGGTGAGCTGGACGAGTTCCTGCTGGAGTACGACCGGATGGTGGATGAGAGC
TCAGTGAACCCCGGTCAGCAGCTGTACGAAAAGATCATTGGCGGAAAGTACATGGGCGAGCTGGTACGAC
TTGTGCTGCTCAAGCTGGTAGAGGAGAATCTTCTGTTCCACGGAGAGGCCTCAGAGCAGCTGCGCACACG
TGGTGCTTTTGAGACCCGTTTTGTGTCGCAGGTGGAGAGCGACTCTGGGGACCGAAGGCAGATCCTTAAC
ATCCTGAGCACTCTGGGCCTTCGACCCTCTGTCGCCGACTGCGACATTGTGCGCCGTGCCTGTGAAAGCG
TGTCCACTCGCGCCGCCCACATGTGCTCAGCAGGACTAGCGGGGGTCATAAATCGCATGCGCGAAAGCCG
CAGTGAGGACGTGATGCGCATCACGGTGGGCGTGGATGGCTCCGTGTACAAGCTGCACCCGAGCTTCAAG
GAGCGGTTTCACGCCAGTGTGCGCAGGCTGACACCCAACTGCGAAATCACCTTCATTGAATCAGAGGAGG
GCAGCGGCAGGGGAGCCGCACTGGTCTCTGCGGTGGCCTGCAAGAAGGCTTGCATGCTGGGCCAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: BC011139

Insert Size: 1398 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

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:	BC011139, AAH11139
RefSeq Size:	1798 bp
RefSeq ORF:	1397 bp
Locus ID:	103988
Cytogenetics:	11 3.88 cM
Gene Summary:	Catalyzes the initial step in utilization of glucose by the beta-cell and liver at physiological glucose concentration. Pancreatic glucokinase plays an important role in modulating insulin secretion. Hepatic glucokinase helps to facilitate the uptake and conversion of glucose by acting as an insulin-sensitive determinant of hepatic glucose usage.[UniProtKB/Swiss-Prot Function]