

Product datasheet for **SC119244**

GCKR (NM_001486) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCKR (NM_001486) Human Untagged Clone
Tag:	Tag Free
Symbol:	GCKR
Synonyms:	FGQTL5; GGRP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC119244 sequence for NM_001486 edited (data generated by NextGen Sequencing)

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ATGCCAGGCACAAAACGGTTTCAACATGTCATTGAGACCCCGAGCCTGGCAAGTGGGAG
TTGTCTGGGTACGAGGCAGCTGTGCCAATCACGGAGAAGTCAAACCCACTGACCCAGGAT
CTAGACAAAGCAGATGCTGAGAACATTGTTGACTGCTAGGGCAATGTGATGCTGAGATC
TTCCAGGAGGAGGGCAAGCCCTGTCCACATACCAGAGACTCTACAGCGGATCCATTCTG
ACCACCATGGTACAGGTGGTGGGAAAGTTCAGGAAGTCTGAAGGAGCCAGATGGGGGG
CTGGTTGTGCTGAGTGGAGGGGGCACCTCTGGCCGGATGGCATTCTCATGTCGGTGTCC
TTAATCAGCTGATGAAAGGTCTGGGACAGAAACCTCTTTACACCTACCTCATTGCAAGT
GGTACAGGTCTGTGGTGGCCTCTAGGGAGGGGACAGAAGATAGTGCCTTGCACGGGATT
GAGGAACTGAAGAAGGTGGCTGCCGGGAAGAAGAGAGTGATTGTCATTGGCATTCTGTG
GGACTCTCTGCTCCCTTTGTGGCAGGCCAGATGGACTGCTGCATGAACAACACAGCTGTC
TTCTTGCCAGTCTCGTTGGCTTCAATCCAGTGAGCATGGCCAGAAATGACCCCATGAA
GACTGGAGTTCAACATTCGACAAGTAGCAGAGCGGATGCAGAAAATGCAGGAGAAACAG
AAAGCTTTTGTGCTCAATCCTGCCATCGGGCCGAGGGTCTCAGCGGCTCCTCCCGGATG
AAAGGTGGAAGTGCCACCAAGATTCTGCTGGAAACCCTGTTATTAGCAGCCCATAAAGACT
GTGGACCAAGGCATTGCAGCATCTCAAAGATGCCTCCTGGAAATCTTGCGGACATTTGAG
CGAGTCTATCAGGTGACCTACAGCCAAAGCCCAAGATTGCCACCTGATGAAGAGTGTC
AGCACCAGTCTGGAGAAGAAAGGCCACGTGTACCTGGTTGGTGGCAGACCCTGGGCATC
ATTGCCATCATGGATGGAGTAGAGTGATCCACACCTTTGGTGTGATTTCCGAGATGTC
CGTGGCTTTCTCATTGGTGATCACAGTGACATGTTTAAACCAGAAGGCTGAGCTACCAAC
CAGGGTCCCAGTTCACCTTCTCCAGGAGGACTTCTGACTTCCATCCTTCCCTCTCTC
ACGGAAATCGATACTGTGGTCTTCATTTTACCCTGGATGACAACCTCACGGAGGTGCAG
ACTATAGTGGAGCAGGTGAAAGAGAAGACCAACCACATCCAGGCCCTGGCACACAGCACC
GTGGGTGACAGCTTGCCGATCCCTCTGAAGAAGCTCTTTCCCTCCATCATCAGCATCACA
TGGCCACTGCTTTTCTTTGAATATGAAGGGAACCTCATCCAGAAGTTCCAGCGTGAGCTA
AGCACCAAATGGGTGCTGAATACAGTGAGTACAGGTGCTCATGTGCTTCTTGGTAAGATC
CTACAAAACCACATGTTGGACCTTCGGATTAGCAACTCCAAGCTTCTTGGCGGGCGCTG
GCCATGCTGCAGCGTCTCTGGACAGTCCAAGGCTCGATGCATCGAGAGCCTCCTCCGA
GCGATCCACTTTCCCAGCCACTGTCAGATGATATTCGGGCTGCTCCCATCTCCTGCCAT
GTCCAGGTTGCACATGAGAAGGAACAGGTGATACCCATCGCCTTGCTGAGCCTCCTATTC
CGGTGCTCGATCACTGAGGCTCAGGCACACCTGGCTGCAGCTCCTTCTGTCTGTGAGGCT
GTCAGGAGTGCTCTTGTGGGCCAGGTCAGAAGCGCACTGCGGACCCCTCGAGATCCTA
GAGCCTGACGTTCAGTGA
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Clone variation with respect to NM_001486.3
230 a=>g;1337 t=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001486 unedited
 GTTAGCATTGTATACTATCACTATAGGCGGCACGCGATTCCGGCAGCATCTGAAGAGCAG
 GAGGAACAGTGTATCCACAGCGTGGGACCATGCCAGGCACAAAACGGTTTCAACATGTCA
 TTGAGACCCCGGAGCCTGGCAAGTGGGAGTTGTCTGGGTACGATGCAGCTGTGCCAATCA
 CGGAGAAGTCAAACCCACTGACCCATGATCTATACAAAGCAGATGCTGATAACATTGTTCT
 GACTGCTAAGGCAATGTGATGCTGAGATCTTCCAGGAGGAGGGCAAGCCCTGTCCACAT
 ACCATAGACTCTACAGCGGATCCATTCTGACCACCATGGTACAGGTGGCTGGGAAAAGTTT
 ATGAAGTGTGAAGGATCCAGATGGGGGGCTGGTTGTGCTGATTGGAGGGGGCACCTCTG
 GCCGGATGGCATTCTCATGTGCGGTGTCCTTTAATCAGCTGATGAAAGGTCTGGGACAGA
 AACCTCTTTACCTACCTCATTGCAGGTGGTACAGGTCTGTGGTGGCCTCTATGGAGG
 GGACAGAAGATAGTGCCTTGACGGGATTGAAGAACTGAAGAATGTGGCTGCCGGGAAGA
 ATATAGTGATTGTCATTGGCATTCTGTGGGACTCTCTGCTCCCTTTGTGGCAGGCCAGA
 TGGACTGCTGCATGAACAACACAGCTGTCTTCTGCCAGTCTGGTTGGCTTCAATCCAG
 TGAGCATGGCCAGAAATGACCCATTGTAGACTGGAGTTCAACATTCCGACAAGTAGCAT
 AGCGGATGCAGAAAATGCAAGATAAACAGAAAGCTTTTGTGCTCAATCCTGCCATCAGGC
 CCCGATGGTCTCATCGGCTCCTNCCGATGATATGTGGGAGTGCCACAAGATTCTGCTG
 GAAAACCTGTTATTATACGCCATTAGACTGTGCAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001486 unedited
 GTTGACCATTGGCTGATGGCACTTGCCAGNCCAGTATAGGCCTGGGNAGGGTCACAG
 GGCATGCCACCCGGTATCTGTTACGGCAAACAGCTATGACCGCGCCGCAATCTAGAGT
 CGAGTTTTTTTTTTTTTTTTTTTTTTTTTAACTTTCCAAAATAAGACATTTCATTTTATTT
 CTGAAATCAGAATAAGTCGGTGAGAGTAGAAACCACTAGGTCGAGAGCAAGAACTCTCCC
 CCAAAGTGGAGAGAATATTTCTCCCTACCCTGGGCTGCGGATGCCCTGGAAACGGGGCTT
 CTTCTCCACATGTTCTGCTGGCACAAGTCCCCTTGGGCGGGCTGGGCTGAAGTGGGCA
 GGGTTGGGCCCTTTACCCACCCAGAAACATGGGTTCACTGAACGTCAGGCTCTAGGAT
 CTCGAGGGGGTCCGCAGTGCCTTCTGACCTGGCCAGCAAGAGCACTCCTGACAGCCTC
 ACAGACAGAAGGAGCTGCAGCCAGGTGTGCCTGAGCCTCAGTGATCGAGCACCGGAATAG
 GAGGCTCAGCAAGGCGATGGGTATCACCTGTTCCCTTCTCATGTGCAACCTGGACATGGCA
 GGAGATGGGAGCAGCCCGAATATCATCTGACAGTGGCTGGGAAAAGTGGATCGCTCGGAG
 GAGGCTCTCGATGCATCGAGCCTTGGACTGTCCAGAGAACCGCTGCAGCATGGCCAGCGC
 CCGCCAGAAGAGCTTGGAGTTGCTAATCCGAAGTCCAACATGTGGTTGTGTAGGATCTTA
 CCAAGAAGCACATGAGCACCTGTACTACTGTATTGAGCACCTTTTTGTGCTTAGCTCA
 CGCTGGAACTTCTGGATGAAGTTCCTTCATATTCAAGAAAAACAGTGGCCATGTGATGC
 TGAT

Restriction Sites:

NotI-NotI

ACCN:

NM_001486

Insert Size:

2250 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: [NM_001486.2](#), [NP_001477.1](#)

RefSeq Size: 2197 bp

RefSeq ORF: 1878 bp

Locus ID: 2646

UniProt ID: [Q14397](#)

Cytogenetics: 2p23.3

Domains: SIS

Gene Summary: This gene encodes a protein belonging to the GCKR subfamily of the SIS (Sugar ISomerase) family of proteins. The gene product is a regulatory protein that inhibits glucokinase in liver and pancreatic islet cells by binding non-covalently to form an inactive complex with the enzyme. This gene is considered a susceptibility gene candidate for a form of maturity-onset diabetes of the young (MODY). [provided by RefSeq, Jul 2008]