

Product datasheet for **MR209160**

Gckr (NM_144909) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gckr (NM_144909) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gckr
Synonyms:	GKRP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR209160 representing NM_144909
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAAGCACCAAGCGGTATCAGCATGTGATCGAGACCCTGAGCCTGGGAATGGGAGTTGTCAGGGT
 ATGAAGCAGCTGTGCAATCACAGAGAAGTCCAACCCACTGACCCGGAACCTGGACAAAGCAGATGCAGA
 GAAAATTGTTCAACTGCTGGGGCAGTGTGATGCTGAGATATTCCAGGAGGAGGGGCAAATCATGCCACC
 TACCAGCGACTGTACAGTGTGAGTCTGACCACCATGTTGCAAGTGGCTGGCAAGTCCAGGAAGTGC
 TGAAGGAGCCAGATGGGGCCTGGTGGTCTGAGTGGAGGGGCACCTCTGGTCGATGGCATTCTTAT
 GTCTGTCTTTCAACCAGCTGATGAAAGGTCTGGGACAAAAACCTCTTACACATACCTCATTGCAGGG
 GGTGACAGGTCTGTTGTAGCCTCTCGGGAACGGACAGAAGATAGCGCCCTACACGGAATCGAGGAGCTGA
 AGAAGGTGGCTGTGGGAAAAGAGAGTGGTTCGTTATAGGCATTTCCGTGGGACTCTCTGCGCCCTTGT
 GGCAGGCCAGATGGACTACTGCATGGATAACACAGCTGTCTTCTGCCGGTCCTGGTTGGCTTCAATCCG
 GTGAGCATGGCCAGAAATGATCCCATTTAAGACTGGAGATCGACATTCGACAAGTGGCAGAGCGGATGC
 AGAAGATGCAGGAGAAACAGGAAGCCTTTGTGCTCAATCCTGCCATCGGGCCTGAGGGGCTCAGTGGCTC
 TTCCCGAATGAAAGGTGGAAGCGCCACCAAGATTCTACTGGAAACCTGCTACTAGCAGCCATAAGACT
 GTGGACCAGGGTGTGTGCTCTCAAAGATGCCTTCTGGAAATCCTGAGGACATTTGAGCGGGCTCATC
 AGGTAACCTACAGTCAAAGTTCAAAATGGCCACTCTGACGAAGCAAGTTGGCATCAGCCTGGAGAAAA
 AGGCCACGTGCACTTGGTTGGCTGGCAGACCCTCGGTATCATCGCCATTATGGATGGGGTAGAGTGTATC
 CACACTTTTGGTGCTGATTTCCGAGATATCCGTGGCTTCTTATTGGTGACCACAATGACATGTTTAACC
 AGAAGGATGAGCTCAGCAATCAGGGTCCCAGTTCACCTTCTCTCAGGATGACTTCTGACTTCTGTTCT
 GCCATCCCTTACGGAAATGACACTGTGGTCTTCAATTTTACCCTGGATGATAACCTCGCAGAAAGTACAG
 GCCCTGGCAGAAAAGGTGAGGGAGAAGTGGAAACATCCAGGCCCTGGTGCACAGCACAGTGGGGCAGT
 CCTTGCCAGTCTCTAAAGAAGCTCTTCCCTCGCTCATCAGCATCACATGGCCACTTCTTTTCTCGA
 TTATGAAGGGAGCTACGTTCAGAAGTCCAGCGTGAAGTAAAGCACAAGTGGGTGTTGAATAACAAGGTT
 TCAGGACAGTCCAAGGCTCGCTGCATTGAGAGTCTTCTCAAGTATACATTTCCCTCAACCCTGTCGA
 ATGATGTCGCGCGGCCCCATCTCTGCCATGTCCAGGTTGCCACGAGAAGGAAAAGGTATCCCCAC
 AGCCTTGCTGAGTCTCTACTCAGGTGCTCCATCACTGAGGCTAAGGAACGCCTGGCTGCAGCTTCTTCA
 GTCTGTGAGGTTGTTAGGAGCGCCCTCTCTGGCCAGGTCAGAAACGCAGCATCCAAGCCTTTGGAGACC
 CTGTGGTCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR209160 representing NM_144909
 Red=Cloning site Green=Tags(s)

MPSTKRYQHVIETPEPGEWELSGYEAAPITEKSNPLTRNLDKADAEKIVQLLGQCDAEIFQEQQIMPT
 YQRLYSESVLTTMLQVAGKVQEVLEKPDGGLVVLSSGGTSGRMAFLMSVSNQLMKGLGQKPLYTYLIA
 GDRSVVASRERTEDSALHGIEELKVAAGKRVVIGISVGLSAPFVAGQMDYCMDNTAVFLPVLVGFNP
 VSMARNDPIEDWRSTFRQVAERMQKMQEKQEFVLPNPAIGPEGLSGSSRMKGGSATKILLETLLAAHKT
 VDQGVVSSQRCLLEILRTFERAHQVYYSQSSKIATLTKQVGISLEKKGHVHLVWQTLGIIAIMDGVETI
 HTFGADFRDIRGFLIGDHNDMFNQKDEL SNQGPQFTFSQDDFLT SVLPSL TEIDTVVFI FTLDDNLAEVQ
 ALAERVREKSWNIQALVHSTVGGQSLPAPLKKLFPPLSISITWPLLFFDYEGSYVQKQRELSTKWLNTRF
 SQQSKARCIESLLQVIHFPQPLSNDVRAAPI SCHVQVAHEKEKVIPTALLSLLLRC SITEAKERLAAASS
 VCEVRSALSGPGQKRSIQAFGDPVVP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9039_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144909

ORF Size: 1761 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_144909.2](#)

RefSeq Size: 2024 bp

RefSeq ORF: 1764 bp

Locus ID: 231103

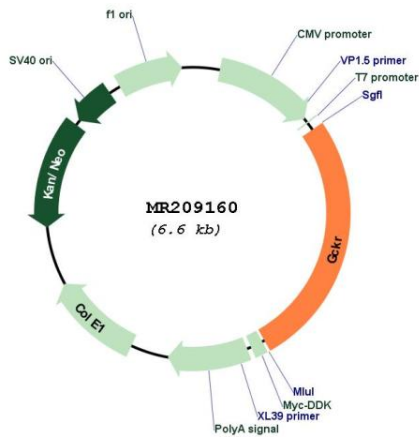
UniProt ID: [Q91X44](#)

Cytogenetics: 5 17.27 cM

MW: 65.1 kDa

Gene Summary: Inhibits glucokinase (GCK) by forming an inactive complex with this enzyme. The affinity of GCKR for GCK is modulated by fructose metabolites: GCKR with bound fructose 6-phosphate has increased affinity for GCK, while GCKR with bound fructose 1-phosphate has strongly decreased affinity for GCK and does not inhibit GCK activity (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209160