

## Product datasheet for **MR220816**

### Dgkz (NM\_001166597) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dgkz (NM_001166597) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dgkz
Synonyms:	E130307B02Rik; ENSMUSG00000075035; F730209L11Rik; mDGK[z]
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR220816 representing NM_001166597 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGACCTTCTTTAGGAAGCATTTCCAACGAAAGGCACGAGGTCCCGGAGAGAGGCAGCGGGTCCA  
GTGGCGTGGGGCTGCCACAGGCAAGGCTCGACGCCGCTCCCCTGCAGGGCAGGCGTCTCTTCACTGGC  
CCAGAGGCGCGCTCCAGTGCACAGCTCCAGGGCTGTTTTCCAGCTGCGGGTGGGCACGAGAGGTGCC  
AGCCGAGGCGATCCAGCACTGCACCCCTACCTGCAATCCCGCTTCATGGTGGATGTGGTGCCTACCC  
TACAGCCTGTACAGTTGGGGCCAGCTTCTGGGTGCACCCCTGTGTTGGCTGGGCTCACAAAGCATGAA  
GGAGGAAGAGGAGGAGGAAGGGTCCAGGAGGAAATGAGACAGCTGAGGCGACAAGTGATGCTAGGCCA  
GGTACCCGGACAACGCCCTTCTCACACAGGGCACCTGGCCACTGCTTCCATGCCCCGCTGCCTGCGTC  
GAGCCTCCTCCCACCTGCTCCTGCTGATGTGGAGTGTGGCCATACCCCTTGGGGCTGCATGGTACTA  
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TTCGCGAATCAGGCTCCAGGAATGTCGGTGGACCAACCTTCGTAAGACACCACTGGGTCCACAGACGAC  
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GAAAGGACCTGAGGAAGCCGCTGGAGACCTTATCATCAGACCCACCCATCCCCCTCATGAAACCC



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CTGCTGGTGTGTTGTGAACCCCAAGAGTGGGGGCAACCAGGGTGCCAAGATCATCCAGTCTTTTTGTGGT  
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GAGACTGCAGCGGGAGCCGATGGGGCTGGAGCCAAGTCCCCGATGTGCCACCACTCTCCTCCAAGTGG  
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ACAGCTGTG

ACGGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR220816 representing NM\_001166597  
 Red=Cloning site Green=Tags(s)

METFFRKHFQRKARGPGERQRRSSGVGLPTGKARRRSPAGQASSSLAQRSSAQLQGCFPSCGVGTRGA  
 SRRRSSTAPPTCNPRFMVDVVPVTLQPVTVAQLLQAPLLLAGL TSMKEEEEEEGVQEGNETAEATSDARP  
 GTRTTPF SHQGTWPLLPMPRCLRRASSHLLPADVECGHTLWGLHGHYRRLSQRWPSGQHPGLGGRSPRAS  
 GAAACPMIPARVRLSRRRQVALRRKSAGPQWSTLLMKAITKSGLQHLAPPPPTPGAPCGESEEQIQST  
 VDWSESAVYGEHIWFETNVSGDFCYVGEQHCVAKMLPKSAPRKKCAACKIVVHTQCICKLEKINFRCKPS  
 FRESGSRNVREPTFVRHHVHRRRQDGKCRHCGKGFQKQKFTFHSKEIVAI SCWCKQAYHSKVS CFMMQ  
 IEPECSLGVHAAVVIPPTWILRARRPQNTLKASKKKRASFKRRSSKKGPEEGRWRPFIIRPTPSPLMKP  
 LLVFNPKSGGNQGAKIIQSFLWYNPRQVFDLSQGGPREALEMYRKHNLRLACGGDGTGVWILSTLD  
 QLRLKPPPPVAILPLGTGNDLARTLNWGGGYTDEPVSKILSHVEEGNVVQLDRWDLRAEPNPEAGPEERD  
 DGATDRLPLDVFNNYSLGFDHVTLEFHESREANPEKFNRSFRNKM FYAGTAFSDFLMGSSKDLAKHIR  
 VVCDGMDLTPKIQDLKPQCIVFLNIPRYCAGTMPWGHGPEHDFEPQRHDDGYLEVIGFTMTSLAALQVG  
 GHGERLTQCREVLLTTAKAIPVQVDGEPCKLSASRIIRIALRNQATMVQKAKRRSTAPLHSDQQPVPEQLR  
 IQVSRVSMHDYEALHYDKEQLKEASVPLGTVVVPGSDLELCRAHIERLQREPDGAGAKSPMCHQLSSKW  
 CFLDATTASRFYRIDRAQEHLNYYVEIAQDEIYILDPELLGASARPDLPPTSPLPASPCSPTPGSMQGD  
 TALPQGEELIEAAKRNDCCKLQELHRAGGDLMHRDQKSRLLHHA VSTGSKEVVRYLLDHAPPEILDAVE  
 ENGETCLHQAAALGQRTICHYIVEAGASLMKTDLQGDTPRQRAEKAQDTELAAYLENRQHYQMIQREDQE  
 TAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mm9097\\_d03.zip](https://cdn.origene.com/chromatograms/mm9097_d03.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

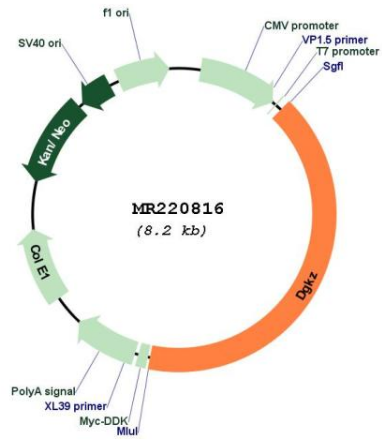


ACCN: NM\_001166597

ORF Size: 3369 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001166597.1</a> , <a href="#">NP_001160069.1</a>
<b>RefSeq Size:</b>	4090 bp
<b>RefSeq ORF:</b>	3372 bp
<b>Locus ID:</b>	104418
<b>Cytogenetics:</b>	2 E1
<b>MW:</b>	125.1 kDa
<b>Gene Summary:</b>	Displays a strong preference for 1,2-diacylglycerols over 1,3-diacylglycerols, but lacks substrate specificity among molecular species of long chain diacylglycerols. Regulates RASGRP1 activity (By similarity). Positively regulates insulin-induced translocation of SLC2A4 to the cell membrane in adipocytes. Activates PIP5K1A activity via generation of phosphatidic acid (PubMed:27739494).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR220816