

## Product datasheet for **MG222176**

### Dgkh (NM\_001081336) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dgkh (NM_001081336) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dgkh
Synonyms:	5930402B05Rik; D130015C16; DGK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222176 representing NM_001081336 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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AACCATCTTACGAAAATCGTCAACTCTGATGAGCATGCGGTGGTCATATCGTCTGCCAAGATACTCTGTG  
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CCGAAAGTGGTCATATGAAGCGAATTCTCCAGGGAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222176 representing NM\_001081336  
 Red=Cloning site Green=Tags(s)

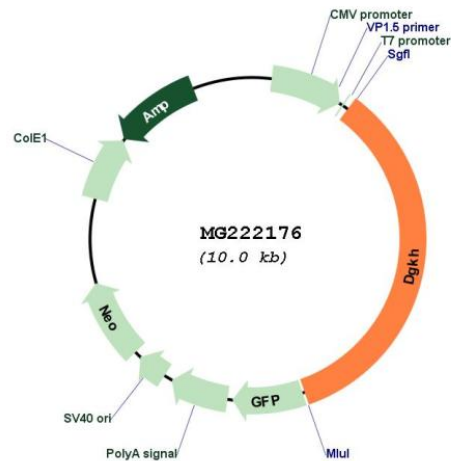
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 VSQMR LCSQA AEELITRICDAATIHCLLEQELAHAVNACSHALNKANPRFPESLTRDTATEIAINVKALY  
 NETEALLVGRVPLHLESPHEERVSSALHSVEMELQKLEIPWLYILRPSDEEPLDCTKRNNKSTVFR  
 IVPKFKKEKAQKQKTSQPGGDSSESGSYEANSPOGN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI  
 Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001081336

ORF Size: 3468 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\\_001081336.1](#), [NP\\_001074805.1](#)

RefSeq Size: 3967 bp

RefSeq ORF: 3543 bp

Locus ID: 380921

UniProt ID: [D3YXJ0](#)

Cytogenetics: 14 D3

**Gene Summary:**

Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:27643686). Thereby, acts as a central switch between the signaling pathways activated by these second messengers with different cellular targets and opposite effects in numerous biological processes (Probable). Plays a key role in promoting cell growth. Activates the Ras/B-Raf/C-Raf/MEK/ERK signaling pathway induced by EGF. Regulates the recruitment of RAF1 and BRAF from cytoplasm to membranes and their heterodimerization (By similarity). [UniProtKB/Swiss-Prot Function]