

## Product datasheet for **RG216667**

### DGKD (NM\_003648) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DGKD (NM_003648) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DGKD
Synonyms:	DGK-delta; dgkd-2; DGKdelta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216667 representing NM_003648 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAATATGTTTCTGTACTTTCAGACCATCATCAAAGAGGGGATGCTGACCAAACAGAACAATTCATTCC  
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ATGGCCAAGAAGTGTCTGTCCTGAAAGAGAAGCTGGATTCCCTTCTCAAGACCTTGGACGATGAGTCCC  
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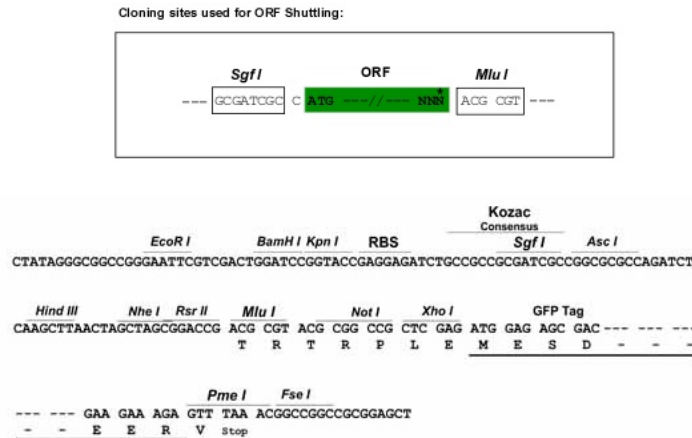
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG216667 representing NM\_003648  
 Red=Cloning site Green=Tags(s)

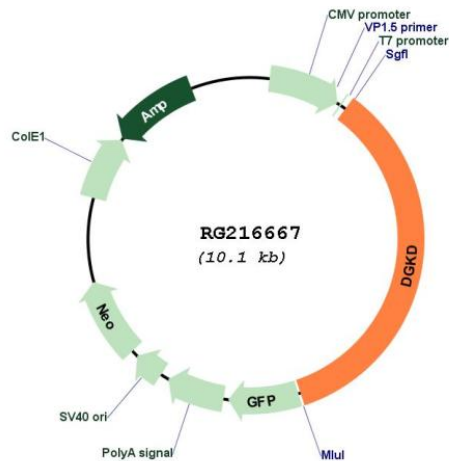
MNMFLYFQTIIEGMLTKQNSFQRSKRRYFKLRGRTLYYAKTAKSIIIFDEVLDASVAESSTKNVNS  
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 MAKKCSVLKEKLDLKLTLDDSEQASSLPNPPPTIAEEAEDGDGSGSICGSTGDRLVASACPARPQIFR  
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 ADPFNSEPETLEYYTEKVMNNYFGIGLDAKISLDFNNKRDEHPEKCRSRTKNMMWYGLGKELLHRTY  
 KNLEQKVLLECDGRPIPLPSLQGI AVLNIPSYAGGTNFWGGTKEDDTFAAPSFDKILEVVAVFGSMQMA  
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 KQKCELP RPPSCSLHPEMLSEEEATQMDQFGQAAGVLIHSIREIAQSHRMEQELAHAVNASSKSMDRVY  
 GKPRTEGLNCSFVLEMVNNFRALRSETELLL SGKMALQLDPPQKEQLGSALAEMDRQLRRLADTPWLCQ  
 SAEPGDEESVMLDLAKRSRSGKFRLVTKFKKEKNKNKEA HSSLGAPVHLWGTEEVAAWLEHLSLCEYKD  
 IFTRHDIRGSELLHLERRDLKDLGVTKVGHMKRILCGIKELSR SAPAVEA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI  
**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_003648

ORF Size: 3510 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\\_003648.3](#)

RefSeq Size: 6229 bp

RefSeq ORF: 3513 bp

Locus ID: 8527

UniProt ID: [Q16760](#)

Cytogenetics: 2q37.1

<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system
<b>Gene Summary:</b>	<p>This gene encodes a cytoplasmic enzyme that phosphorylates diacylglycerol to produce phosphatidic acid. Diacylglycerol and phosphatidic acid are two lipids that act as second messengers in signaling cascades. Their cellular concentrations are regulated by the encoded protein, and so it is thought to play an important role in cellular signal transduction. Alternative splicing results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]</p>