

Product datasheet for **RG214081**

DGKG (NM_001346) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DGKG (NM_001346) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DGKG
Synonyms:	DAGK3; DGK-GAMMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG214081 representing NM_001346
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTGAAGAACGGTGGGTCTCCCTCACTCCAGAAGAATTTGACCAACTCCAGAAATATTCAGAATATT
 CCTCCAAGAAGATAAAAGATGCCTTGACTGAATTTAATGAGGGTGGGAGCCTCAAACAATATGACCCACA
 TGAGCCGATTAGCTATGATGTCTTCAAGCTGTTTCATGAGGGCGTACCTGGAGGTGGACCTTCCCCAGCCA
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 GAGCCAGCAACAGTGAGGCCAACAGCGCAGATACTAATATACAGAATGCAGATAATGCCACCAAAGCAGA
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 AGTGGATGGAGAACCCTGGATGCAGCCATGTTGCACGATTAATAATTAACAAGAACAAGCGCCCATG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214081 representing NM_001346
Red=Cloning site Green=Tags(s)

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MGEERWVSLTPEEFDQLQKYSEYSSKKIKDALTEFNEGGSLKQYDPHEPISYDVFKLFMRAYLEVDLPQP
LSTHLFLAFSQKPRHETSDHPTEGASNSEANSADTNIQNADNATKADEACAPDTESNMAEKQAPAEQVA
ATPLEPPVPRSSSESPVVYLKDVVCYLSLLETGRPQDKLEFMFRLYDSDENGLLDQAEMDCIVNQLHI
AQYLEWDPTELRPIKEMLQGM DYDRDGFVSLQEWHVGGMTTIPLLVLLGMDDSGSKGDGGHAWTMKHF
KPTYCNFCHIMLMGVRKQGLCCTYCKYTVHERCVSKNIPGCVKTYSKAKRSGEVMQHAWVEGNSSVKCDR
CHKSIKCYQSVTARHCVWCRMTFHRKCELSTLCDGGELRDHILLPTSICPITRDRPGEKSDGCVSAK
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GGDGTVGWILDICIDKANFAKHPVAVLPLGTGNDLARCLRWGGYEGGSLTKILKDIEQSPLVMLDRWHL
EVIPREEVENDQVPYSIMNNYSIGVDASIAHRFHVMREKHPEKFNSRMKNKLWYFEFGTSETFAATCK
KLHDHIELECDGVGVDLSNIFLEGIAILNIPSMYGGTNLWGENKKNRAVIRESRKGVTDPKELKFCVQDL
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MMGPPQKSSFFSLRRKRSKD
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001346

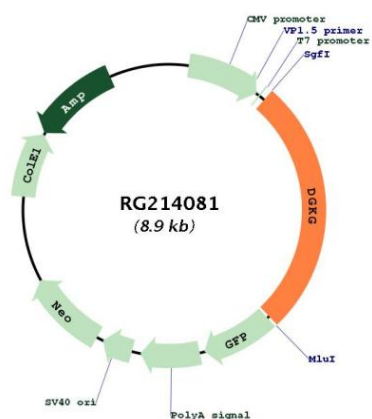
ORF Size: 2373 bp

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:	<ol style="list-style-type: none">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:	<u>NM_001346.1</u> , <u>NP_001337.1</u>
RefSeq Size:	3758 bp
RefSeq ORF:	2376 bp
Locus ID:	1608
UniProt ID:	<u>P49619</u>
Cytogenetics:	3q27.2-q27.3
Domains:	DAGKa, DAGKc, EFh, DAG_PE-bind
Protein Families:	Druggable Genome
Protein Pathways:	Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system
Gene Summary:	This gene encodes an enzyme that is a member of the type I subfamily of diacylglycerol kinases, which are involved in lipid metabolism. These enzymes generate phosphatidic acid by catalyzing the phosphorylation of diacylglycerol, a fundamental lipid second messenger that activates numerous proteins, including protein kinase C isoforms, Ras guanyl nucleotide-releasing proteins and some transient receptor potential channels. Diacylglycerol kinase gamma has been implicated in cell cycle regulation and in the negative regulation of macrophage differentiation in leukemia cells. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG214081