

## Product datasheet for **RG219587**

### DGKI (NM\_004717) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DGKI (NM_004717) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DGKI
Synonyms:	DGK-IOTA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219587 representing NM_004717 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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GCTGGAGGAGAAGCTGAGGAACCTAACCTTCCGGAAGCAGGTCTCGTACAGGAAAGCAATCTCCCGGCA  
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GATGGGACAGTTGTACAGCTAGATCGCTGGAACCTCCATGTGGAAAGAAACCCCGACTTGCCTCCAGAAG  
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 CAGAACTATAAGGTCATTGGCCATGAGGACCTGGAAACTGCTGTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG219587 representing NM\_004717  
 Red=Cloning site Green=Tags(s)

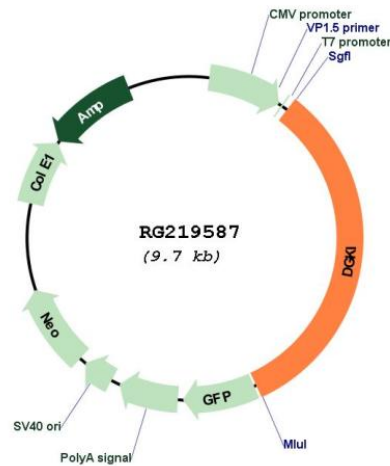
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 IVAISCSWCKQAFHNKVTCFMLHHIEEPCSLGAHAAVIVPPTWIIKVKKPNQSLKASNRKKKRTSFKRKA  
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 HGPSSELLDMADSETGETALHKAACQRNRAVCQLLDAGASLRKTDKSGKTPQERAQQAGDPDLAAYLESR  
 QNYKVI GHEDLETA V

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_004717

**ORF Size:** 3195 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.

<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_004717.3</a>
<b>RefSeq Size:</b>	4780 bp
<b>RefSeq ORF:</b>	3198 bp
<b>Locus ID:</b>	9162
<b>UniProt ID:</b>	<a href="#">Q75912</a>
<b>Cytogenetics:</b>	7q33
<b>Domains:</b>	DAGKa, DAGKc, ANK, DAG_PE-bind
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system
<b>Gene Summary:</b>	This gene is a member of the type IV diacylglycerol kinase subfamily. Diacylglycerol kinases regulate the intracellular concentration of diacylglycerol through its phosphorylation, producing phosphatidic acid. The specific role of the enzyme encoded by this gene is undetermined, however, it may play a crucial role in the production of phosphatidic acid in the retina or in recessive forms of retinal degeneration. [provided by RefSeq, Jul 2008]