

Product datasheet for **RG222395**

DGKA (NM_001345) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DGKA (NM_001345) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DGKA
Synonyms:	DAGK; DAGK1; DGK-alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG222395 representing NM_001345
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCAAGGAGAGGGGCTAATAAGCCCCAGTGATTTTGCCAGCTGCAAAAATACATGGAATACTCCA
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 CCCCCGCTCCACCAATTTCTTTGGCTTCTTGAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG222395 representing NM_001345
Red=Cloning site Green=Tags(s)

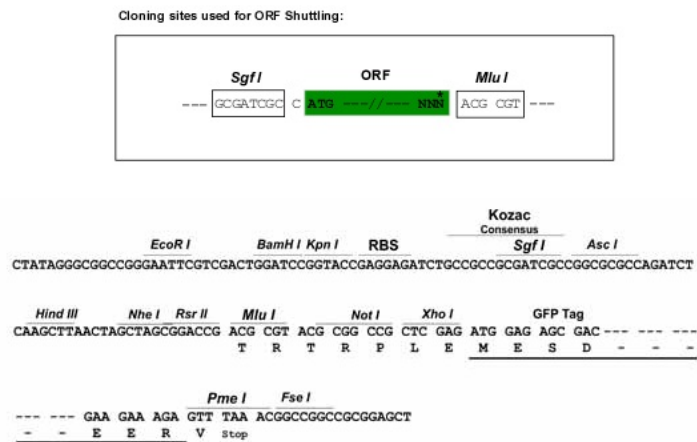
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FATSEIFSTCKKLEESL TVEICGKPLDLSNLSLEGI AVLNIPSMHGGSNLWGDTRRPHGDIYGINQALG
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PWMQTPCTIKITHKNQMPMLMGPPRSTNFFGFLS
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001345

ORF Size: 2205 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_001345.5](#)

RefSeq Size: 2756 bp

RefSeq ORF: 2208 bp

Locus ID: 1606

UniProt ID: [P23743](#)

Cytogenetics: 12q13.2

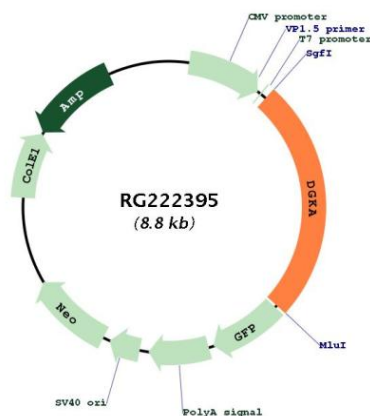
Domains: DAGKa, DAGKc, EFh, DAG_PE-bind

Protein Families: Druggable Genome

Protein Pathways: Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system

Gene Summary: The protein encoded by this gene belongs to the eukaryotic diacylglycerol kinase family. It acts as a modulator that competes with protein kinase C for the second messenger diacylglycerol in intracellular signaling pathways. It also plays an important role in the resynthesis of phosphatidylinositols and phosphorylating diacylglycerol to phosphatidic acid. Several transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Apr 2017]

Product images:



Circular map for RG222395