

Product datasheet for **RC219913**

DGKE (NM_003647) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DGKE (NM_003647) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DGKE
Synonyms:	AHUS7; DAGK5; DAGK6; DGK; NPHS7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC219913 representing NM_003647
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGCGGAGAGGCGGCCGGCTCGCCTCCGAGGGCCTGTTTGCAGACGGGCACCTGATCT
 TGTGGACGCTGTGCTCGGTCTGCTGCCGGTGTTCATCACCTTCTGGTGTAGCCTCCAGCGGTCCGCGCCG
 GCAGCTGCACCGCAGGGACATCTTCCGCAAGAGCAAGCACGGATGGCGGACACGGACCTGTTCAGCCAG
 CCCACCTACTGCTGCGTGTGCGCGCAGCACATTCTGCAGGGCGCCTTCTGCGACTGCTGCGGGCTCCGCG
 TGGACGAGGGTGCCTCAGGAAGGCCGACAAGCGCTTCCAGTGAAGGAGATTATGCTCAAGAATGACAC
 CAAGGTCTGGACGCCATGCCCCACCACTGGATCCGGGGCAACGTGCCGCTGTGCAGTTACTGTATGGTT
 TGCAAGCAGCAGTGTGGCTGTCAACCAAGCTTTGCGATTACAGGTGCATTTGGTCCAGAAAACAGTAC
 ATGATGAGTGCATGAAAAATAGTTTAAAGAATGAAAAATGTATTTGGAGAATTCAAAAACCTAATCAT
 TCCACCAAGTTATTTAACATCCATTAATCAGATGCGTAAAGACAAAAAACAGATTATGAAGTGCTAGCC
 TCTAAGCTTGGAAAGCAGTGGACCCATTAATAATCCTGGCCAACCTCTCGTAGTGGAACTAATATGGGAG
 AAGGACTGTTGGGAGAATTTAGGATCTTGTGAATCCAGTCCAGGTTTTTGTATGTAATAAACTCCTCC
 TATCAAAGCCCTACAACCTGTACTCTTCTCCATATTATTACAGTCCAGTACTTGTGTTGTGGAGGGGAT
 GGGACTGTAGGGTGGTCTGGATGCAGTTGATGACATGAAGATTAAGGGACAAGAAAAGTACATTTCCAC
 AAGTTGCAGTTTTGCCTCTGGGAACAGGCAACGATCTATCCAATACATTTGGTTGGGGTACAGGTTATGC
 TGGAGAAATCCAGTTGCGCAGGTTTTGCGAAAATGTAATGGAAGCAGATGGAATTAAGTATAGATCGATGG
 AAAGTTCAAGTAACAAAATAAAGGATACTACAACCTAAGAAAACCAAGGAATTCACAATGAACAACATTT
 TTTCTGTTGGACCTGATGCTCTCATGGCTCTCAATTTTTCATGCTCATCGTGAAGGACCACTCTGTT
 TTCTAGCAGAATCTTAATAAGGCGTTTTACTTATTCTATGGAACCAAGATTGTTTAGTGAAGAATGT
 AAAGATTTGAATAAAAAAGTTGAGCTAGAAGTGGATGGTGGAGCAGTAGCACTGCCAGCTTGAAGGTA
 TTATAGTTCTGAACATCGGATACTGGGCGGTGGCTGCAGACTATGGGAAGGGATGGGGACGAGACTTA
 CCCTCTAGCCAGGCATGACGATGGTCTGCTGGAAGTCTGTTGGAGTATATGGGCTTTTCCACTGTGCTCAG
 ATTCAAGTAAACTGGCTAATCCTTTTTCGAATAGGACAGGCACATACAGTGGGCTGATTTTGAAGTGT
 CCATGATGCCAATGCAGGTGGATGGGGAGCCTTGGGCCCAAGGGCCCTGCACTGTACCATAACTCACAA
 GACACATGCAATGATGTTATATTTCTCTGGAGAACAACAGATGATGACATCTCTAGTACTTCGGATCAA
 GAAGATATAAAGCGGACTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219913 representing NM_003647
 Red=Cloning site Green=Tags(s)

MEAERRPAPGSPSEGLFADGHLILWTLCSVLLPVFITFWCSLQRSRRQLHRRDIFRKSKHGWRDLDLFSQ
 PTYCCVCAQHILQGAFCDCCLRVDEGLRKAADKRFQCKEIMLKNDTKVLDAMPHHWIRGNVPLCSYCMV
 CKQQCGCQPKLCDYRCIWCQKTVHDECMKNSLKNEKCDFGEFKNLIIPPSYLTINQMRKDKKTDYEVLA
 SKLGKQWTPLIILANSRSGTNMGEGLLGEFRILLNPVQVFDVTKPPIKALQLCTLLPYYSARVLVCGGD
 GTVGWVLDVAVDDMKIKGQEKYIPQVAVLPLGTGNDLSNTLWGWTGYAGEIPVAQVLRNVMEADGIKLDRW
 KVQVTNKGYYNLRKPKFTMNNYF SVGPDALMALNFHAHREKAPSLFSSRILNKAVYLFYGTGDCLVQEC
 KDLNKKVELELDGERVALPSLEGIIVLNIGYGGGCRLEWGMDETYPLARHDDGLLEVVGVYGSFHCAQ
 IQVKLANPFRIGQAHTVRLILKCSMMPMQVDGEPWAQGPCTVTITHKTHAMMLYFSGEQTDDDISSTSDQ
 EDIKATE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6161_a05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003647

ORF Size: 1701 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_003647.3](#)

RefSeq Size: 2562 bp

RefSeq ORF: 1704 bp

Locus ID: 8526

UniProt ID: [P52429](#)

Cytogenetics: 17q22

Domains: DAGKa, DAGKc, DAG_PE-bind

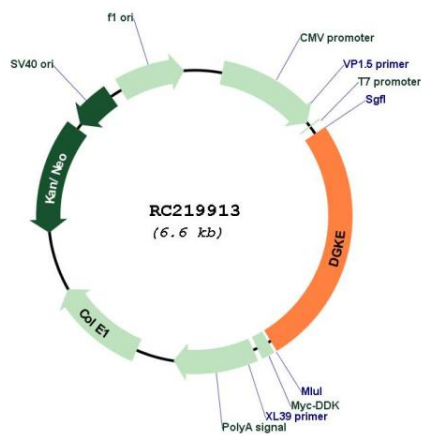
Protein Families: Druggable Genome, Transmembrane

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

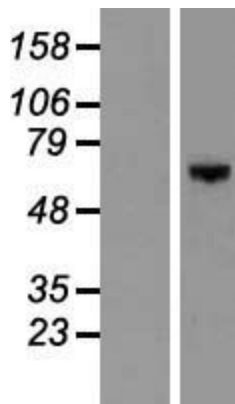
MW: 63.7 kDa

Gene Summary: Diacylglycerol kinases are thought to be involved mainly in the regeneration of phosphatidylinositol (PI) from diacylglycerol in the PI-cycle during cell signal transduction. When expressed in mammalian cells, DGK-epsilon shows specificity for arachidonyl-containing diacylglycerol. DGK-epsilon is expressed predominantly in testis. [provided by RefSeq, Jul 2008]

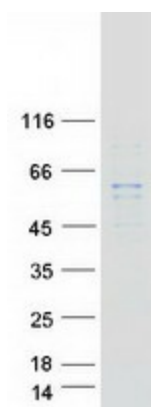
Product images:



Circular map for RC219913



Western blot validation of overexpression lysate (Cat# [LY418530]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219913 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DGKE protein (Cat# [TP319913]). The protein was produced from HEK293T cells transfected with DGKE cDNA clone (Cat# RC219913) using MegaTran 2.0 (Cat# [TT210002]).