

## Product datasheet for SC119320

### DAGK (DGKQ) (NM\_001347) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DAGK (DGKQ) (NM_001347) Human Untagged Clone
Tag:	Tag Free
Symbol:	DAGK
Synonyms:	DAGK; DAGK4; DAGK7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_001347 edited  
CGAGGCGGCAGTGTAGCGGCGGCTCCTGTACCCCCGGCGCGGACCTAAAGGGGCTCGGGC  
CGCTCGGGCCGGGAATGGCGGCGGCGCGAGCCCGGGGCCCGCCTGGCTGGGCGGCG  
GCTCCCCGCGCCCGGCAGCCCGGCTGCAGCCCGTGTGGGCTCAGGAGGCCGCGCGC  
GCCCGGGGCCGGGGCCGGGGCCGGGACCCGAGCGGGCGGCGTACAGCCCGGGCCCCG  
CTGCCGCGCCGGGACACAGCTTCCGGAAGGTGACGCTACCAAGCCACCTTCTGCCACC  
TCTGCTCCGACTTCATCTGGGGGCTGGCCGGCTTCTGTGCGACGTCTGCAATTCATGT  
CTCATGAGAAGTGCCTGAAGCACGTGAGGATCCCGTGCACGAGTGTGGCACCCAGCCTGG  
TCCGGGTTCCTGTAGCCACTGCTTCGGCCCCGGGGGCTCCACAAGCGCAAGTTCTGTG  
CTGTCTCGCCGAAGTCTGGAGGCACCGCGCTCCACTGCGAAGTGTGTGAGCTGCACC  
TCCACCCAGACTGTGTGCCCTTCGCTGCAGTACTGCCGCCAGTGCCACCAGGATGGGC  
ACCAGGATCACGACACCCATCACCACCACTGGCGGGAGGGGAACCTGCCCTCGGGAGCGC  
GCTGCGAGGTCTGCAGGAAGACGTGCGGCTCCTCTGACGTGTGGCCGGCGTGCGCTGCG  
AGTGGTGCGGGTCCAGGCGCACTCCCTCTGCTCCGCGGCGTGGCTCCCAGTGTGGCT  
TCGGGGCTCTGCGCTCCCTGGTCTGCCTCCCGCGTGCCTGCGCCTTCTGCCCGGGCT  
TCAGCAAGACGCAGAGCTTCCGCATCGTGGAGGCCGCGGAGCCGGGCGAGGGGGGCGACG  
GCGCCGACGGGAGCGCTGCCGTGGTCCAGGCAGAGAGACACAGGCAACTCCGGAGTCCG  
GGAAGCAAACGCTGAAGATCTTTGATGGCGACGACGCGGTGAGAAGAAGCCAGTTCGGCC  
TCGTTACGGTGTCCCGCTGGCCGGTGGCGAGGAGTGTGGAGCCGCACTGCGGGGCC  
ACCACATCCCCGAGGACCTGGCCACCTGGAGCTGTGCCGCTGCCCTTCTCTCAGG  
CCTGTGACGCTGGGCTGGGGGCAAGGCTGGGAGTGTGTGATCTCGGAGGAGGGCAGAA  
GCCCGGGTCCGGCGAGGCCACGCCAGAGGCTGGGTATCCGGGCTCTGCCGCGGGCCC  
AGGAGGTCTGAAGATCTACCCTGGTGGCTCAAGGTGGGCGTGGCTACGTGTCCGTGC  
GAGTGACCCCGAAGAGCACGGCCGCTCTGTGGTGTGGAGGTCTGCCGCTGCTCGGCC  
GCCAGGCCGAGAGTCCCAGAGCTTCCAGCTGGTGGAGGTGGCGATGGGCTGCAGGCACG  
TCCAGCGGACGATGCTGATGGACGAACAGCCCCTGCTGGACCGGTACAGGACATCCGGC  
AGATGTCTGTGCGCAGGTGAGCCAGACCGGTTCTACGTGGCAGAGAGCAGGGATGTAG



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CCCCGCACGTCTCCCTGTTTGGTGGCGGCCTGCCTCCCGCCTGTCTCCCGAGGAGTACA  
 GCAGCCTGCTGCATGAGGCCGGGGCTACCAAAGCCACCGTGGTGTCCGTGAGTCACATCT  
 ACTCCTCCAAGGCGCGGTAGTGTGGACGTTGCCTGCTTTGCGGAGGCCGAGCGGCTGT  
 ACATGCTGCTGAAGGACATGGCTGTGCGGGGCCGGCTGCTCACTGCCCTGGTGTCTCCCG  
 ACCTGTGCACCGAAGTGCCTCCAGACAGCTGTCCCTCCTTGTGTTTCGTGAACCCCA  
 AGAGTGGAGGCCCTCAAGGGCCGAGACCTGCTCTGCAGTTCGGAAGCTACTGAACCTC  
 ATCAGTCTTTCGACCTGACCAACGGAGGTCCTCTCCCGGGCTCCACCTGTTCTCCAGG  
 TGCCCTGCTTCCGGGTGCTGGTGTGGTGGCGATGGCACTGTGGGTGGGTGCTTGGCG  
 CCCTGGAGGAGACACGGTACCGACTGGCCTGCCCGGAGCCTTCTGTGGCCATCCTGCCCC  
 TGGGCACAGGGAATGACCTTGGTCGAGTCTCCGCTGGGGGGCGGGCTACAGCGGCAGG  
 ACCCGTCTCCGTACTGCTGTGTGGACGAGGCCGACCGCTGCTCATGGACCGCTGGA  
 CCATCCTGCTGGATGCCACGAGGCTGGCAGTGCAGAGAACGACACGGCAGACGCAGAGC  
 CCCCCAAGATCGTGCAGATGAGTAACTACTGTGGCATTGGCATCGACGCGGAGCTGAGCC  
 TGGACTCCACCAGGCACGGGAAGAGGAGCCTGGCAAGTTCACAAGCAGGCTGCACAACA  
 AGGGTGTGTACGTGCGGGTGGGGCTGCAGAAGATCAGTCACTCTCGGAGCCTGCACAAGC  
 AGATCCGCTGCAGGTGGAGCGGCAGGAGGTGGAGCTGCCAGTATTGAAGGCCTCATCT  
 TCATCAACATCCCCAGCTGGGGCTCGGGGGCCGACCTGTGGGGCTCCGACAGCGACACCA  
 GTTTGTAGAAGCCACGCATGGACGACGGGCTGCTGGAGTTGTGGGCGTGACGGGCGTGC  
 TGACATGGGCCAGGTCCAGGGTGGGCTGCGCTCCGGAATCCGGATTGCCAGGGTTCCT  
 ACTTCCGAGTCACGCTCCTCAAGGCCACCCCGTGCAGGTGGACGGGGAGCCCTGGGTCC  
 AGGCCCGGGGCACATGATCATCTCAGCTGCTGGCCCTAAGGTGCACATGCTGAGGAAGG  
 CCAAGCAGAAGCCGAGGAGGGCCGGGACCACAGGGATGCCGGGCGGATGCTGCGCCTG  
 CCCCTGAGAGCGATCCTAGGTAGGGTGGCTGGGGCAGCCCAAGGGCTCGAGCCATCTCT  
 GCTCCCGCCAGCCTTGTTCAGGTGGTCTGGAGGCAGTCCACGTCCACACAGTGGCCA  
 GCC

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_001347 unedited  
 NGGGTACATTTGTATACGACTCACTATAGCGGCCGCAATTCGCACGAGGCGGCAGTG  
 TAGCGGCGGCTCCTGTACCCCGCGCGGACCTAAAGGGCTCGGGCCGCTCGGGCCGGGA  
 ATGGCGGCGGCGGCCGAGCCCGGGGCCCGCGCCTGGCTGGGCGGCGGCTCCCCGCGCCC  
 GGCAAGCCCGGCTGCAGCCCGTGTGGCTCAGGAGGCCGCGCGCCCGGGGCCGGGG  
 CCGGGGCCGGACCCGAGCGGGCGGCGTCAAGGCCCGGGCCCGCTGCGCGCGCGGGA  
 CACAGCTTCCGGAAGGTGACGCTACCAAGCCACCTTCTGCCACCTCTGCTCCGACTTC  
 ATCTGGGGGCTGGCCGGTTCCTGTGCGACGTCTGCAATTCATGTCTCATGAGAAGTGC  
 CTGAAGCACGTGAGGATCCCGTGCACGAGTGTGGCACCCAGCCTGGTCCGGGTTCTGTGA  
 GCCACTGCTTCCGCCCCGGGGCTCCACAAGCGCAAGTTCGTGTCTGCTGCCGAAG  
 GTCCTGGAGGCACCGGCTCCACTGCGAAGTGTGTGAGCTGCACCTCCACCCAGACTGT  
 GTGCCCTTCGCTGCAGTACTGCGCCAGTGCACCAGGATGGGCACCAGGATCACGAC  
 ACCCATACCACTGCGGGGAGGGGAACCTGCCCTCGGGAGCGCGCTGCGAGGTCT  
 GCAGGAAGACGTGCGGCTCCTCTGACGTGCTGGGCCGCGTGCCTGCAAGTGGTGGCGGG  
 GTCGAAGCGCACTCCCTCTGCTCCGCGCGCTGGCTCCCCGAGTGTGGCTTCGGGCGTCT  
 CGGCTCCTGGTCTGCTCCCGCTGCGTGGCCNCTGCCCC

<b>3' Read Nucleotide Sequence:</b>	>Forward primer walk for NM_001347 unedited TAAGCGGAGTTCCAACANAACCGGNATGCCGGNCCACCAGGCATGCCCGGGCGGCTGC TGCGCCTGCCCTGAGAGCGATCCTAGGTAGGGGTGGCTGGGCAGCCCAAGGCTCGAGC CATCTCTGCTCCCGCCAGCCTTGTTCAGGTGGTCTGGAGGCAGCTCCACGTCCACACA GTGGCCAGCCCTGTGGTCGGACCTGGCTACAGCCCTGACCGGGCATCTTCCCAGTGACG GAGCGGGACTAGCCCTCATCCCATTGGTGACACATGTTGGTGTACAGCCCTCATCCCAC TGGAGACTGGTGTGCGGGTGGCAGTGTTACCCCGTGTCCCGGGTGGGCGCAGGGCTTGG ATGGTGAGCCCTTGCCCTGTGGGGCCTGGTCCTCTCCTCAGGGGTGGGCACCCATCCC TCTCCCCACTGAGCCCTTGAGCTGGACAGTGCTGGATGCAGGCCGTCCAGGTGGGTCTG ATCTCACTTTGTGCCCTCGGGCCGTCCCCTGGCCAGTCCTTCAGAGAGGCAGGCTCCC TGGTGTGTCCCTGCCCCAGCAGACAGGCTGCCAGTCCCTCCAGCCTCACCTCCCCGCC CTGGGCAGCAGGTGTGGCAGCGTGTGAGGCTGCCGGTGGTGGTACTGGTACTTCTCT TGTGTTACAGGAAGGGAGAAGGTGCCTTCCCTTGTTCCTGGCCTGTTATATACAGATG GCAGCTTGGATCTCAGGTACAGCTCCAGGGGCAGGCAGTCCCAGCTGGACCTGGTGCC CTTTCCTAGTGCCTCTGTGGGGGAGGAGACCTCTGTTACGTGGAGGCTAGGAGGTNC TTCAGGTGCTGCCCTGGCAGCACCAAGTGTGGGCCGGG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_001347
<b>Insert Size:</b>	5130 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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_001347.2</a> , <a href="#">NP_001338.2</a>
<b>RefSeq Size:</b>	4653 bp
<b>RefSeq ORF:</b>	2829 bp
<b>Locus ID:</b>	1609
<b>UniProt ID:</b>	<a href="#">P52824</a>
<b>Cytogenetics:</b>	4p16.3
<b>Domains:</b>	RA, DAGKa, DAGKc, DAG_PE-bind
<b>Protein Families:</b>	Druggable Genome

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

**Gene Summary:** The protein encoded by this gene contains three cysteine-rich domains, a proline-rich region, and a pleckstrin homology domain with an overlapping Ras-associating domain. It is localized in the speckle domains of the nucleus, and mediates the regeneration of phosphatidylinositol (PI) from diacylglycerol in the PI-cycle during cell signal transduction. [provided by RefSeq, Jul 2008]