

Product datasheet for **RC201891**

Acylglycerol Kinase (AGK) (NM_018238) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acylglycerol Kinase (AGK) (NM_018238) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acylglycerol Kinase
Synonyms:	CATC5; CTRCT38; MTDPS10; MULK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201891 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACGGTGTCTTTAAACGCTTCGAAATCACTGGAAGAAAACACAGCTGGGCTCTGCCTGCTGACCT
 GGGGAGGCCATTGGCTCTATGGAACAACTGTGATAACCTCCTAAGGAGAGCAGCCTGTCAAGAAGCTCA
 GGTGTTTGGCAATCAACTCATTCTCCCAATGCACAAGTGAAGAAGGCCACTGTTTTTCTCAATCCTGCA
 GCTTGCAAAGGAAAAGCTAGGACTCTATTTGAAAAAATGCTGCCCGATTTTACATTTATCTGGCATGG
 ATGTGACTATTGTTAAGACAGATTATGAGGGACAAGCCAAGAACTCCTGGAAGTATGGAAGACACGGA
 TGTGATCATTGTTGCAGGAGGAGATGGGACACTGCAGGAGGTTTACTGGTGTCTTCGACGAACAGAT
 GAGGCTACCTTCAGTAAGATTCCCATTGGATTTATCCCACTGGGAGAGACCAGTAGTTTGAGTCATACCC
 TCTTTGCCGAAAGTGAAACAAAGTCCAACATATTACTGATGCCACACTTGCCATTGTGAAAGGAGAGAC
 AGTTCCACTTGATGTCTGCAGATCAAGGGTGAAGGAACAGCCTGTATTTGCAATGACCGGCCTTCGA
 TGGGGATCTTTCAGAGATGCTGGCGTCAAAGTTAGCAAGTACTGGTATCTTGGGCCTCTAAAAATCAAAG
 CAGCCCACTTTTTCAGCACTCTTAAGGAGTGGCCTCAGACTCATCAAGCCTCTATCTCATACACGGGACC
 TACAGAGAGACCTCCCAATGAACCAGAGGAGACCCTGTACAAAGGCCTTCTTTGTACAGGAGAATATTA
 CGAAGGCTTGGCTCTACTGGGCACAACCACAGGATGCCCTTTCCAAGAGGTGAGCCCGGAGGTCTGGA
 AAGATGTGCAGCTGTCCACCATTGAACTGTCCATCACACACGGAATAATCAGCTTGACCCGACAAGCAA
 AGAAGATTTTCTGAATATCTGCATTGAACCTGACACCATCAGCAAAGGAGACTTTATAACTATAGGAAGT
 CGAAAGGTGAGAAACCCCAAGCTGCACGTGGAGGGCACGGAGTGTCTCCAAGCCAGCCAGTGCACCTTGC
 TTATCCCGGAGGAGCAGGGGGCTCTTTTAGCATTGACAGTGAAGGAGTATGAAGCGATGCCTGTGGAGGT
 GAAACTGCTCCCAGGAAGCTGCAGTTCTCTGTGATCCTAGGAAGAGAGAACAGATGCTCACAAGCCCC
 ACCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201891 protein sequence
 Red=Cloning site Green=Tags(s)

MTVFFKTLRNHWKKTAGLCLL TWGGHWLYGKHCDNLLRRAACQEAQVFGNQLIPPNAQVKKATVFLNPA
 ACKGKARTLFEKNAAPILHL SGMDVTIVKTDYEGQAKKLELEMENTDVIIVAGGDGTLQEVVTVGLRRTD
 EATFSKIPIGFIPLGETSSL SHTLFAESGNKVQHITDATALIVKGETVPLDVLQIKGEKEQPVFAMTGLR
 WGSFRDAGVKVSKYWYLGPLKIKAAHFFSTLKEWPQTHQASISYTGPTERPPNEPEETPVQRPSLYRRIL
 RRLASYWAQPQDALSQEVSPEVWKDVQLSTIELSITTRNNQLDPTSKEDFLNICIEPDTISKGDFITIGS
 RKVRNPKLHVEGTECLQASQCTLLIPEGAGGSFSIDSEYEAMPVEVKLLPRKLQFFCDPRKREQMLTSP
 TQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6803_h07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_018238

ORF Size: 1266 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

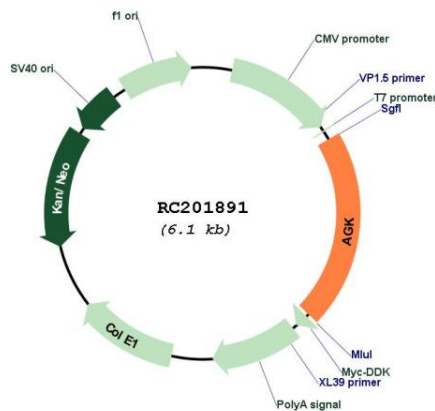
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_018238.2](#), [NP_060708.1](#)

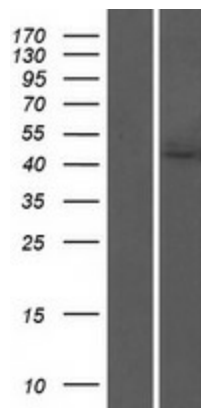
RefSeq Size: 2925 bp
RefSeq ORF: 1269 bp
Locus ID: 55750
UniProt ID: [Q53H12](#)
Cytogenetics: 7q34
Domains: DAGKc
Protein Pathways: Glycerolipid metabolism, Metabolic pathways
MW: 47.1 kDa

Gene Summary: The protein encoded by this gene is a mitochondrial membrane protein involved in lipid and glycerolipid metabolism. The encoded protein is a lipid kinase that catalyzes the formation of phosphatidic and lysophosphatidic acids. Defects in this gene have been associated with mitochondrial DNA depletion syndrome 10. [provided by RefSeq, Feb 2012]

Product images:



Circular map for RC201891



Western blot validation of overexpression lysate (Cat# [LY413180]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201891 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).