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Product datasheet for RC202930

DGKA (NM_201444) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DGKA (NM_201444) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DGKA
Synonyms:	DAGK; DAGK1; DGK-alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC202930 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAAGGAGAGGGGCCTAATAAGCCCCAGTGATTTTGCCCAGCTGCAAAAATACATGGAATACTCCA
CCAAAAAGGTCAGTGATGTCCTAAAGCTCTTCGAGGATGGCGAGATGGCTAAATATGTCCAAGGAGATGC
CATTGGGTACGAGGGATTCCAGCAATTCCTGAAAATCTATCTCGAAGTGGATAATGTTCCCAGACACCTA
AGCCTGGCACTGTTTCAATCCTTTGAGACTGGTCACTGCTTAAATGAGACAAATGTGACAAAAGATGTGG
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CACCTTCAAGCTGTACGACACGGACAGAAATGGGATCCTGGACAGCTCAGAAGTGGACAAAATTATCCTA
CAGATGATGCGAGTGGCTGAATACCTGGATTGGGATGTGTCTGAGCTGAGGCCGATTCTTCAGGAGATGA
TGAAAGAGATTGACTATGATGGCAGTGGCTCTGTCTCTCAAGCTGAGTGGGTCCGGGCTGGGGCCACCAC
CGTGCCACTGCTAGTGCTGCTGGGTCTGGAGATGACTCTGAAGGACGACGGACAGCACATGTGGAGGCCC
AAGAGGTTCCCCAGACCAGTCTACTGCAATCTGTGCGAGTCAAGCATTGGTCTTGGCAAACAGGGACTGA
GCTGTAACCTCTGTAAGTACACTGTTCACGACCAGTGTGCCATGAAAGCCCTGCCTTGTGAAGTCAGCAC
CTATGCCAAGTCTCGGAAGGACATTGGTGTCCAATCACATGTGTGGGTGCGAGGAGGCTGTGAGTCCGGG
CGCTGCGACCGCTGTCAGAAAAAGATCCGGATCTACCACAGTCTGACCGGGCTGCATTGTGTATGGTGCC
ACCTAGAGATCCACGATGACTGCCTGCAAGCGGTGGGCCATGAGTGTGACTGTGGGCTGCTCCGGGATCA
CATCCTGCCTCCATCTTCCATCTATCCCAGTGTCCTGGCCTCTGGACCGGATCGTAAAAATAGCAAAACA
AGCCAGAAGACCATGGATGATTTAAATTTGAGCACCTCTGAGGCTCTGCGGATTGACCCTGTTCCTAACA
CCCACCCACTTCTCGTCTTTGTCAATCCTAAGAGTGGCGGGAAGCAGGGGCAGAGGGTGCTCTGGAAGTT
CCAGTATATATTAAACCCTCGACAGGTGTTCAACCTCCTAAAGGATGGTCCTGAGATAGGGCTCCGATTA
TTCAAGGATGTTCCTGATAGCCGGATTTTGGTGTGTGGTGGAGACGGCACAGTAGGCTGGATTCTAGAGA
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ACCCAGTCCCCTTTCAAATCATCAATAACTACTTCTCTATTGGCGTGGATGCCTCTATTGCTCATCGATT
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GCTACAGCTAAAGTCATCACCGACCCTGATATCCTGAAAACCTGTGTACCAGACCTAAGTGACAAGAGAC
TGGAAGTGGTTGGGCTGGAGGGTGCAATTGAGATGGGCCAAATCTATACCAAGCTCAAGAATGCTGGACG
TCGGCTGGCCAAGTGCTCTGAGATCACCTTCCACACCACAAAAACCCTTCCCATGCAAATTGACGGAGAA
CCCTGGATGCAGACGCCCTGTACAATCAAGATCACCCACAAGAACCAGATGCCCATGCTCATGGGCCCAC
CCCCCCGCTCCACCAATTTCTTTGGCTTCTTGAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202930 protein sequence
Red=Cloning site Green=Tags(s)

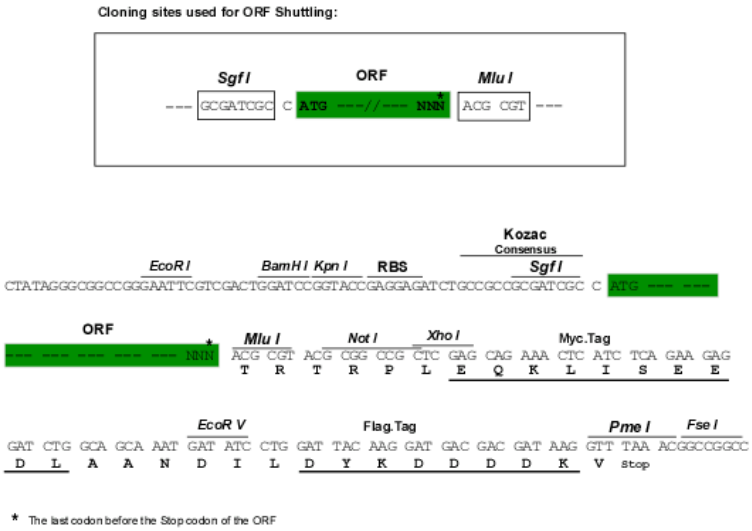
MAKERGLISPSDFAQLQKYMEYSTKKVSDVLKLFEDGEMAKYVQGDAIGYEGFQQFLKIYLEVDNVPRHL
SLALFQSFETGHCLNETNVTKDVVCLNDVSCYFSLLEGGRPEDKLEFTFKLYDTDRNGILDSSEVDKIIL
QMMRVAEYLDWDVSELRPILQEMMKEIDYDGSGSVSQAEWVRAGATTVPLLVLLGLEMTLKDDGQHMWRP
KRFPRPVYCNLCESSIGLGKQGLSCNLCKYTVHDQCAMKALPCEVSTYAKSRKDIGVQSHVWVRGGCESG
RCDRCQKKIRIYHSLTGLHCVWCHLEIHDDCLQAVGHECDCGLLRDHILPPSSIYPSVLASGPDRKNSKT
SQKTMDDLNLSTSEALRIDPVPNTHPLLVFVNPKSGGKQGQRVLWKFQYILNPRQVFNLLKDGPEIGLRL
FKDVPDSRILVCGGDGTVGWILETIDKANLPVLPPVAVLPLGTGNDLARCLRWGGGYEGQNLAKILKDLE
MSKVVHMDRWSVEVIPQQTEEKSDPVPFQIINNYFSIGVDASIAHRFHIMREKYPEKFNSRMKNKLWYFE
FATSESIFSTCKKLEESLTVEICGKPLDLSNLSLEGIAVLNIPSMHGGSNLWGDTRRPHGDIYGINQALG
ATAKVITDPDILKTCVPDLSDKRLEVVGLEGAIEMGQIYTKLKNAGRRLAKCSEITFHTTKTLPMQIDGE
PWMQTPCTIKITHKNQMPMLMGPPPRSTNFFGFLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6565_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_201444

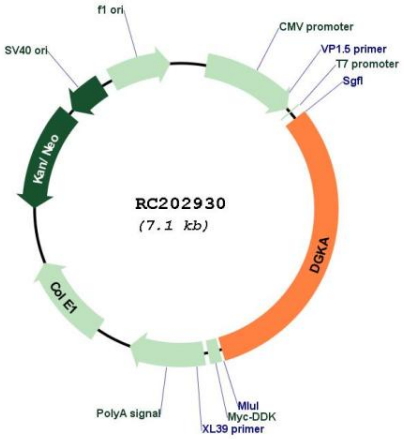
ORF Size: 2205 bp

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

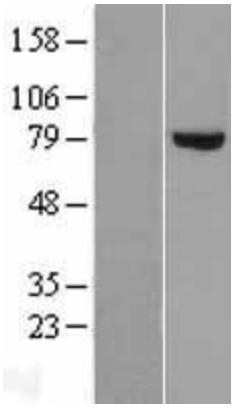
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_201444.2, NP_958852.1
RefSeq Size:	2801 bp
RefSeq ORF:	2208 bp
Locus ID:	1606
UniProt ID:	P23743
Cytogenetics:	12q13.2
Protein Families:	Druggable Genome
Protein Pathways:	Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system
MW:	82.6 kDa
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]

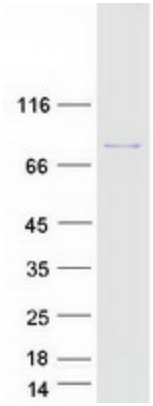
Product images:



Circular map for RC202930



Western blot validation of overexpression lysate (Cat# [LY404458]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC220293] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DGKA protein (Cat# [TP302930]). The protein was produced from HEK293T cells transfected with DGKA cDNA clone (Cat# RC202930) using MegaTran 2.0 (Cat# [TT210002]).