

Product datasheet for **MG211245**

Dgkq (NM_199011) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dgkq (NM_199011) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dgkq
Synonyms:	110kDa; DAGK; Dagk4; DAGK7; Dgkd
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG211245 representing NM_199011
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGGCGGAGCCGAGCCGGTGCCTGGACCTGGCCGGCAGTGGTCCCCACGTCTTGGCAGCCCGG
 CCGGCAGTCCAGTCTGGGCATCTCGGGCCGCACACGCCCGGGTCCAGGGCCGGAGCGGACTAGCAGAGC
 TATTGGCTCCGCAGCACCTGGCCACAGCTTTCGCAAGGTGACACTACCAAGCCTACCTTCTGCCACCTC
 TGCTCGGACTTCACTGCGGACTGGCTGGCTTCTGTGCGATGTCTGCAACTTATGTCCCATGAGAAGT
 GCCTGAAGCAGGTGAAGACCCCGTGCACAAGCATTGCACCAAGCCTCGTCCGGGTGCCTGTAGCCACTG
 CTTTGGTTCCTTGGTCTCTACAAGCGCAAGTTCTGTGTGGTCTGCCGCAAGAGCCTGGAGGTACCCGCA
 TTCGGCTGTGAAGTGTGTGAGCTGCACGTTACCCCGACTGTGTGCCCTTCGCTGCAGCGACTGTCGTC
 AGTGCCACCAGGATGGACAGCAGGATTATGACACGTATCACCACCCTGGAGGGAGGGGAACCTGCCTTC
 TGGTGCACGATGTGAGGTCTGTAGGAAGACTTGTGGTTCCTCAGATGTGCTGGCTGGTGTACGCTGCGAG
 TGGTGTGGTGTACAGGCTCACTCAGTGTCTCCACAGCACTTGGCGCTGAGTGTACATTTGGACGCTAC
 GCTCCATGGTACTGCCTCCTTCGTGTGTGCGCCTGTTGTCCCGAAACTTACAGCAAGATGCACTGTTCCG
 AATCCCTGAGACCATGGTCTGGAGCTTGGTGTGGGGATGATGGCGTAGACGGGAGTGTGCTATAGGC
 ACAGGCAGAGAGGTACTGACAGCTACAGAGTCCACCAACAGACCCTGAAGATCTTTGATGGCAACGACT
 CCATGAGGAAAAATCAGTTTCGTCTGGTTACAGTTTCCCGCTGGCTCGGAATGAGGAAGTGTGGAGGC
 AGCACTTCGGGCTACTATATTAGCGAGGACCCTAAGGACTTCCAGCTGCAGGCACTGCCCTGTCTGGC
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 GCTCAAGGTAGGTGTGGCTACGTGTCCATCCGTGTGAACCTCCAGAGTACAGCACGGTCTGTGGTTCAA
 GAGGTTCTCCCACTGTTTGGACAACAGGTTGAGGATAAGGAGAGATTCCAGCTGATTGAGGTGCTCATGA
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 ACAGACTTCTGTGCGCCAGGTGAGCCAGACGCGGTTCTACGTGGCCGAGACCAGGGCCACGGCCCCACGT
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 CCATGGCCACCAAGCTGCTGTGGTGTCTGTGAGTACGCTACTCCTTACAAGGTGCAGTAATTCTGGA
 CGTCACCTGCTTCGCGGAGGCTGAGCGGCTATACATGCTGGCCAGGACACAGCAGTGCATGGCCGGCCA
 CTGACTGCATTAGTCTCCAGATGTGCTGCACACGAAGCTGCCTCCTGACTGCTGCCCTCTCCTCGTGT
 TTGTGAACCCCAAGAGTGGGGTCTCAAGGGACGAGAAGTGTCTGCAGTTTCCGGAAGCTGCTGAATCC
 GCACCAGGTCTTTGAGCTAACCAACGGGGGCCCTCTTCTGGGTTCCACCTTTTCTCCCAAGTGGCCAGT
 TTTCCGGTACTGGTGTGTGGTGGAGATGGCACCGTTGGCTGGGTGCTCGTGCCTGGAGGAGACAAGGC
 GCCATCTGGCCTGTCCAGAGCCATCTGTGGCCATCTTGGCCCTGGGTACAGGGAATGACCTTGGCCGGGT
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 TCAGGCCCCAGGTCACATGATCATCTCTGCTACTGCACCTAAGGTTACATGCTGAGAAAGGCTAAGCAG
 AAGCCCAGGAAGGCTGGCGCCAACAGGGATACCCGAGTGGACACCTTGCCTGCTCCTGAGGGCAATCCTT
 TA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG211245 representing NM_199011
 Red=Cloning site Green=Tags(s)

MAAAAEPGARTWPGSGSPRLGSPAGSPVLGISGRTRPGSGPERTSRAIGSAAPGHSFRKVTLTKPTFCHL
 CSDFIWGLAGFLCDVCFNMSHEKCLKQVKTPCTSIAPSLVRVPVAHCFGSLGLYKRKFCVVCRKSLEVPA
 FRCEVCELHVHPDCVPFACSDCRQCHQDGGQDYDYTHHHWREGNLP SGARCEVCRKTCGSSDVLAVRCE
 WCGVQAHSVCSTALAEPECTFGRLRSMVLPSCVRLLSRNF SKMHCFRIPETMVLELGDGDDGVDGSAIIG
 TGREVLTATESTKQTLKIFDGNDSMRKNQFRLVTVSRLARNEEVMEALRAYYI SEDPKDFQLQALPLSG
 NAQALGKAGTTEEEASKGSCPRDSVPEAWVIRSLPRTQEILKIYPGWLKVGVAYYSIRVNSQSTARSVVQ
 EVLPLFGQQVEDKERFQLIEVLMSSRQVQRTVLADEEPLLDRLWDIRQTSVRQVSQTRFYVAETRATAPR
 VSLFVGG LPPGLSPQDYSNLLHEAMATKA AVVS VSHVYSLQGAVILDVTCFAEAERLYMLARDTAVHGRP
 LTALVLPDVLHTKLPPDCCPLL VFNPKSGGLKGRELLCSFRKLLNPHQVFEL TNGG LPLGFHLSQVPS
 FRVLVCGDGTGVWVLAAL EETRRHLACPEPSVAI LPLGTGNDLGRVLRWGAGYSGEDPF SVLVSVDEAD
 AVLMDRWTILLDAHEIDSTENNVETEPKIVQMNNYCGIGIDAE LSLDFHQAREE EPGKFSRFHNKGV
 YVRVGLQKISHSRSLHKEIRLQVEQQEVELPSIEGLIFINIPSWGSGADLWGSNDNDRFEKPRIDDGLLE
 VVGVTGVVHMGGVQGG LRS GIRIAQGSYFRVTLTKATPVQVDGEPWVQAPGHMII SATAPKVHMLRKAKQ
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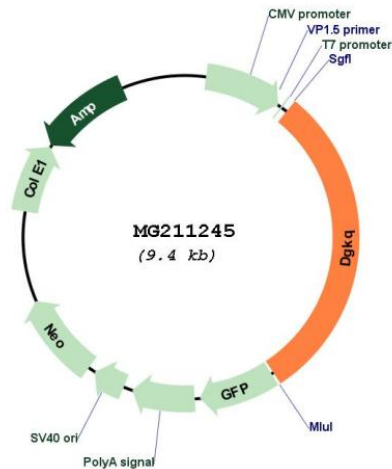
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_199011

ORF Size: 2802 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_199011.2](#)

RefSeq Size: 4612 bp

RefSeq ORF: 2805 bp

Locus ID: 110524

UniProt ID: [Q6P5E8](#)

Cytogenetics: 5 53.24 cM

Gene Summary:

Phosphorylates diacylglycerol (DAG) to generate phosphatidic acid (PA). May regulate the activity of protein kinase C by controlling the balance between these two signaling lipids. Activated in the nucleus in response to alpha-thrombin and nerve growth factor (By similarity). May be involved in cAMP-induced activation of NR5A1 and subsequent steroidogenic gene transcription by delivering PA as ligand for NR5A1. Acts synergistically with NR5A1 on CYP17 transcriptional activity (By similarity).[UniProtKB/Swiss-Prot Function]