

Product datasheet for **MC229347**

Dgkh (NM_001253766) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dgkh (NM_001253766) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dgkh
Synonyms: 5930402B05Rik; D130015C16; DGK
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229347 representing NM_001253766
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTATGTGCTGAGAACAGGAAAGAGATGGAGGCTGGATCAGCTCTCTGAAGTCAGTGCAGAGCAGAG
 AACCTATGAGGTGGCCAGTTCATGTGGAACATTTCTCAGGGATGCACAACCTGGTACGCTGCTCCCA
 CGCCCGCCACCTTCTGTAACGTGTGCAGAGAGAGTCTCTGGAGTGACCTCCACGGCTGTCTGT
 GAAGTGTGTAAGTTCAAGGCTCATAAAGATGTGCAAGTGGGCAACAACTGCAAAATGGACCACGC
 TGGCCTCCATCGGGAAGGACATCATAGAGGACGAGGATGGTGTGCCATGCCCTCACCAGTGGCTCGAAGG
 CACTTGCTGTGAGTGCCAAGTGTGCACTCTGTGACAAAACCTGTGGCAGTGTGCTTCGCTGCAAGAT
 TGGAAATGCCTTTGGTGTAAAGACAATGGTGCACACTGCCTGCAAAGATGTGTACCATCCCGTCTGTCCC
 TTGGCCAGTGTAAAGTCTCCATCATACCTCCGATTGCACTAAATAGCACAGACTCTGATGGTTTCTGTGC
 AGCAACCTTTTCGTTCTGTGTGACCCCCCTTTGGTGTTCGTCAACTCTAAGAGTGGAGATAATCAGGGA
 GTGAAGTTCCTTCGTGCTTTAAACAGTTGCTCAACCCAGCTCAGGTGTTTGATTTAATGAACGGAGGGC
 CTTATTTAGGCTTGAGATTGTTTCAAAGTTTGACAACCTTCGGATCCTTGTCTGTGGAGGAGATGGAAG
 TGTAGGCTGGGTTTTGTCAGAGATTGATAAACTGAACTTGCATAAACAGTGCCAGCTTGGGGTGTACCC
 TTGGGTACCGCAATGACCTGCTCGAGTTCCTGGCTGGGGAGGTTCATATGATGATGACACCAACTCC
 CTCAGATACTAGAGAAGCTGGAACGAGCCAGTACCAAAATGCTGGACAGGTGGAGTATAATGACCTATGA
 GCTCAAATGGCCAGCAAAGTCTGCTCTACTTCTGAACTGTGGCAGCAACTGAAGAATTTTACATGACA
 ATTTATGAAGACTCCGTTGCAAACCATCTTACGAAAATCGTCAACTCTGATGAGCATGCGGTGGTCCATAT
 CGTCTGCCAAGATACTCTGTGAAACCGTGAAGGACTTCGTTGCCAAAGTGGAGAAGGCACAGGACAGAAC
 ACTGAAAATACAGTAGCCGAAGCCGTGGCCAGTAAATGCTCAGTCTAAACGAGAAGCTTGAGCAG
 TTGCTACAAGCCTTGACGCGGACTCTCAGGCCAGTTCGAGTCCCCCAGGAATCGGCCCTGCCATCCCCG
 AAGAGGACACCGTGGAGTCCGCCAGTGCAGAGTCTTGGGTGAAAGCAAGGACCAGCTGGTGAATGACAT
 TGGGAAACCTCCTCCAGAAAGCCGTGAAGCCCCGGGAGATAATGCTGCGGGCCAAACAGTCTAAAGAAA
 CGGGTGGGCAAGTCATTGAAGAAGCTGAAAAGTTATGGATGAGCCAGCAGTGCAGCCCTCTGAGCCAG



TCAGTCCGTCTTGTGACTATGATACAGAAACAGATGAAGCTAAAGAGGACGACGCGAAAGAGTCGCTATC
 AGCCAAAACCACATCTCAGTCTCCTGATGCCAGGCAAGCTGTGGCCATCCCAAAGTACTCTGTGCGT
 GGTCCAGCCATGGCCACCACAAAGAAAACCTCCCTGTGCTCAACACTAGAATCATCTGCCAGGTTTGA
 GAGCAGGACTTGTGCTCCATTGCTGGGAGTTCTATCATCAACAAAATGTTGCTGGCGAACATCGATCC
 TTTCCGGGCAACACCGTTTATTGACCCAGATCTAGACTCACTAGATGGATACTCTGAAAAATGTGCATG
 AACAACTACTTTGGGATTGGATTAGATGCAAAAATTTTCATTAGAATTTAATAAAGAGAGAGGAGCACC
 CTGAAAAATGCAGAAGTCGAACAAAACTTGATGTGGTACGGAGTCCTTGGGACCCGGGAGCTACTACA
 GAGATCGTACAAGAATCTGGAGCAGAGGGTTCAACTTGAGTGTGATGGGCAGTATATACCTCTTCCTAGT
 CTACAAGGCATAGCGGTGTTGAACATCCCTAGCTACGCCGGAGGCACCAACTTCTGGGGCGGAACCAAAG
 AGGATGATATATTTGCTGCGCCATCCTTTGATGACAAGATTCTAGAAGTTGTCGAGTGTGGACAGTGT
 GCAGATGGCAGTATCAAGGGTCATTAATTCAGCATCACCGGATAGCACAGTGGCGTACGGTAAAAATC
 ACGATATTTGGCAGCAGGGAGTCCCAGTGCAGGTGGATGGTGAAGCATGGGTCCAGCCTCCAGGGATCA
 TCAAGATTGTGCACAAAACAGAGCTCAGATGCTAACAGAGACAGAGCCTTTGAAAGCACCTGAAGTC
 TTGGGAAGACAAGCAGAAGTGTGACTCTGGGAAGCCAGTTCTTGAACCAACCTGTACATCCATCCCGCC
 CCTGACCTGGCAACAGAGGAAGTGCACAGATGCGGCTCTGCTCCAGGCTGCGGAGGAAGTCACTACTA
 GGATTTGTGACGACGCCAGGATTCACTGTCTCCTGGAGCAGGAGCTGGCAGTGCAGTGAATGCCTGCTC
 ACACGCCCTGAACAAAGCCAACCCACGCTTCCCGGAGAGCCTTACGAGAGACTGCCACCAGATAGCC
 ATCAACGTCAAGGCGCTCTATAATGAGACAGAGGCTTTGCTAGTTGGCAGGGTCCCTTTGCACTTGGAA
 TCCTCACGAAGAGCGGGTGTCCAGTGCCTTACTCTGTGGAGATGGAGCTTCAGAAGTTAACGGAGAT
 TCCCTGGCTTTATTACATCTCCGCCAGTGGAGCAGGAGCCTCCTCTGGATTGTACAAAAGAAAC
 AACAAAAGCACAGTCTTTCGCATAGTGCCAAAGTTTAAAAGGAAAAGGCTCAGAAACAGAAAACAAGTT
 CGCAGCCTGTTTTCAGAATTGGGGCACAGAGGAAGTTGCTGCTTGGCTGGATCTGCTCAATTTGGGAGAGTA
 CAAAGAAATCTTCAATCCGTCATGACGTGAGGGGCTGAACTTTGTCATCTGAAAGACGAGATCTTAAG
 GACCTGGGGATTCCGAAAGTGGTTCATGAAGCGAATTCTCCAGGGAATTAAGAGCTTGAACGGAACC
 CTCCCACTTGGTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001253766
- Insert Size:** 3237 bp
- OTI Disclaimer:** 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).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001253766.1](#), [NP_001240695.1](#)

RefSeq Size: 3786 bp

RefSeq ORF: 3237 bp

Locus ID: 380921

Cytogenetics: 14 D3

Gene Summary: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:27643686). Thereby, acts as a central switch between the signaling pathways activated by these second messengers with different cellular targets and opposite effects in numerous biological processes (Probable). Plays a key role in promoting cell growth. Activates the Ras/B-Raf/C-Raf/MEK/ERK signaling pathway induced by EGF. Regulates the recruitment of RAF1 and BRAF from cytoplasm to membranes and their heterodimerization (By similarity). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR and has multiple differences in the coding region, one of which results in a translational frameshift, compared to variant 1. The resulting protein (isoform 2) has a shorter N-terminus, a distinct C-terminus, and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.