

Product datasheet for **MC223782**

Dgkh (NM_001081336) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dgkh (NM_001081336) 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: >MC223782 representing NM_001081336
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGGGGCCGGCAGCCAGCACCACCCTCAGGGCGTCGCGGGAGGAGCGGTCGCTGGGGCCAGCGCGG
 TTTCCCCACTGCTGCAGGACCGGGAGAGGATTCGTCGACAGTGAAGCGGAGCAGGAGGGGCCAGAA
 GCTGATCCGTAAGTGTCCACCTCTGGACAGATCGGACCAAGACTAGTATTAAGGAAGGACAACCTGCTG
 AAGCAAACAGCTCTTTCCAAAGGTGGAAGAAGAGATACTTCAAGCTTCGCGGCCGACACTTTATTATG
 CGAAAGACTCCAAGTCTTGATATTTGATGAAGTTGACCTCTCAGATGCCAGTGTGCGGAAGCAAGCAC
 AAAAAATGCCAACACAGCTTTACGATCATCACTCCGTTCCAGAAGACTGATGCTATGTGCTGAGAACAGG
 AAAGAGATGGAGGTCTGGATCAGCTCTCTGAAGTCAGTGCAGAGCAGAGAACCCTATGAGGTGGCCAGT
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 CGTGTGCAGAGAGAGTCTCTCTGGAGTGACCTCCACGGCCTGTCTGTGAAGTGTGAAGTTCAAGGCT
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 TCATACCTCCGATTGCACTAAATAGCACAGACTCTGATGGTTTCTGTGCGACAACTTTTCGTTCTGTGT
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 AAACAGTTGCTCAACCCAGCTCAGGTGTTTGAATTAATGAACGGAGGGCCTTATTTAGGCTTGAGATTGT
 TTCAAAGTTTGACAACCTTCGGATCCTGTCTGTGGAGGAGATGGAAGTGTAGGCTGGGTTTTGTCAGA
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 GCTCGAGTCTTGGCTGGGGAGTTTCATATGATGATGACACCAACTCCCTCAGATACTAGAGAAGCTGG
 AACGAGCCAGTACCAAAATGCTGGACAGGTGGAGTATAATGACCTATGAGCTCAAATTGCCAGCAAAGTC
 GTCTCTACTTCTGAACCTGTGGCAGCAACTGAAGAATTTTACATGACAATTTATGAAGACTCCGTTGCA
 AACCATCTTACGAAAATCGTCAACTCTGATGAGCATGCGGTGGTCATATCGTCTGCCAAGATACTCTGTG



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AAACCGTGAAGGACTTCGTTGCCAAAGTGGAGAAGGCACAGGACAGAACACTGGAAAATACAGTAGTAGC
CGAAGCCGTGGCCAGTAAATGCTCAGTCTAAACGAGAAGCTTGAGCAGTTGCTACAAGCCTTGACGCG
GACTCTCAGGCCAGTTCGAGTCCCCCAGGAATCGGCCCTGCCATCCCCGAAGAGGACACCGTGGAGTCCG
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GCAGAGGGTTCAACTTGAGTGTGATGGGACAGTATACCTCTTCTAGTCTACAAGGCATAGCGGTGTTG
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CATTAAATTGCAGCATCACCGGATAGCACAGTGCCTACGGTAAAAATCACGATATTTGGCGACGAGGGA
GTCCCAGTGCAGGTGGATGGTGAAGCATGGGTCCAGCCTCCAGGGATCATCAAGATTGTGCACAAAAACA
GAGCTCAGATGCTAACAGAGACAGAGCCTTTGAAAGCACCTGAAGTCTTGGGAAGACAAGCAGAAGTG
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GTGTACAGATGCGGCTCTGCTCCCAGGCTGCGGAGGAACATCACTAGGATTTGTGACGCAGCCACGA
TTCAGTGTCTCCTGGAGCAGGAGCTGGCACATGCAGTGAATGCCTGCTCACACGCCCTGAACAAAGCCAA
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AATGAGACAGAGGCTTTGCTAGTTGGCAGGGTCCCTTTGCACTTGAATCTCCTCACGAAGAGCGGGTGT
CCAGTGCCTTACTCTGTGGAGATGGAGCTTCAGAAAGTTAACGGAGATCCCTGGCTTTATTACATCCT
CCGCCCCAGTGAGGACGAGGAGCCTCCTCTGGATTGTACCAAAAGAAACAACAAAGCACAGTCTTTCG
ATAGTGCCAAAGTTTAAAAAGGAAAAGGCTCAGAAACAGAAAACAAGTTCGCAGCCTGGACCTGGGGATT
CCGAAAGTGGTTCATATGAAGCGAATTCTCCAGGGAATTAA

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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001081336
- Insert Size:** 3471 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).
- 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_001081336.1](#), [NP_001074805.1](#)

RefSeq Size: 3967 bp

RefSeq ORF: 3543 bp

Locus ID: 380921

UniProt ID: [D3YXJ0](#)

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 (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcripts and orthologous alignments from human (NM_001204504.1).