

Product datasheet for **MC224002**

Dgkd (NM_177646) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dgkd (NM_177646) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dgkd
Synonyms: AI841987; D330025K09; dgkd-2; DGKdelta
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224002 representing NM_177646
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGGGCGGGCGGGCGCCCTCCGCCGGTCTCCTCAGCCACCTCCGCCGCCCGCCCTGAGGAGT
 CGTCCGACAGTGAACCCGAGGCTGAGCCGGCTCCCCGAGAAGCTTATCCGTAAGGTGCCACGTCGGG
 CCAGATCCGGCAGAAGACCATCCTCAAAGAAGGCATGCTGACCAACAGAACTCGTTCAGCGATCC
 AAGAGGAGGTACTTTAAGCTTCGAGGGCGAACACTTTACTATGCTAAAAGTCAAAGTCGATTATATTTG
 ATGAGGTAGACCTGACTGATGCCAGCGTAGCAGAAATCCAGCACCAAAAAATGTCAACAACAGTTTTACGGT
 CATCACTCCATGTAGGAAGCTCATCTTGTGTGCCGACAACAGGAAAGAAATGGAAGATTGGATTGCAGCA
 CTCAAGACTGTCCAGAACAAGAGCATTGAGCCTACCAATATAGCATGGACCATTTCTCAGGGATGC
 ACAACTGGTATGCTTGTCCCATGCACGGCCAACCTATTGCAATGTGTGTCGTAAGTTTTGTGAGGGGT
 CACATCCCATGGGCTATCCTGTGAAGTGTGAAGTTAAGGCTCACAACGTTGTGCTGTGCGTGAACCT
 AGTAACTGCAAGTGGACCACATTGGCCTCAATCGGAAGGATATCATTGAGGACGAGGATGGGATTGCCA
 TGCCCTCACCAGTGGTTGGAAGGAAACCTGCCTGTGAGTGCCAAGTGTATCGTGTGTGACAAGACTGTGG
 CAGCCTGTACGCTGCAGGACTGGCGCTGCCTCTGGTGCAAAGCCATGGTTCACACATCTTGCAAAGAG
 TCCTTGGTGATGAAGTGTCCACTTGGCCTGTGCAAGGTGTCTGTATCCCTCCCACGGCACTCAACAGTA
 TTGACTCCGATGGGTTCTGGAAGGCCACCTGTCCCGTCTTGTACAAGCCCTCTGCTGGTTTTTGTCAA
 CTCAAAAAGTGGAGACAATCAAGGTGTGAAGTTTCTCAGAAGATTCAAGCAGCTGCTGAACCCTGCCAG
 GTTTTTGACCTCATGAATGGAGGACCACACCTTGGCTTACGGTTATTTCAAGATTTGACACCTTCCGGA
 TTCTGGTTTTGTGGCGGGATGGCAGTGTGGCTGGTCTCTCTGAAATCGATAGCCTCAACCTTCAAA
 ACAGTGCAGCTAGGTGTGCTGCCCTGGGACAGGGAACGACCTGGCCCGTGTCTTGGCTGGGCTCT
 GCCTGTGATGATACACAGCTTCTCAGATCTTGGCAAAGCTGGAGAGGGCCAGCACTAAGATGCTGG
 ACAGGTGGAGTGTATGGCATATGAGACCAAGCTCCCTCGGCAGGCTCCTCCTCCACTGTCACTGAGGA
 CTTTCAGCGAGGACTCAGAGGTGCAGAAATTTCTTCTATGAAGACTCAGTCGCAGCTCATCTTTCTAAA
 ATCTTAACTTCGGACCAGCATTCTGTGGTGTCTCATCAGCCAAAGTGTCTGTGAGACAGTGAAGGACT



TTGTGGCTCGAGTGGCAAGGCCTATGAGAAGACGACAGAGAGCTCGCAGGAGTCAGAGGTCATGGCCAA
GAAGTGTCTGTCTTAAAGAGAAAAGTGGACTCTCTCCTCAAGACCTTGGATGACGAGTCTCAGGCTTCA
TCCTCTGTCTAACCACCTCTACCATTGCTGAGGAGGCTGAGGATGGGGACGGATCAGGCAACATCT
GTAGCTCTACTGGGACCATTTGGTGGGCTCGGCATGCCCTCCCGGCCACAGATCTCCGGCCCCGGGA
GCAGCTAATGCTGAGAGCCAACAGCCTGAAGAAAGCAATTCGCCAGATTATAGAGCACACAGAAAAAGCG
GTGGATGAGCAGAATGCCAGACCCAGGAGCAGCAGGGTTTTGTCCTAGGCCTCTCTGAATCTGAGAAGA
AGGACTGAAGACTGACAACAGGTGTGCACATCATCTGTCCATAGTGAGAGCTGTGTGATTGCCAAGGG
GAGAAGTCAACGCAAAGCATCCAGGGCCCTTGTGAGAAGCTGGTGAGCAAAGGCCTGTCACTCGGCAGC
TCTGCCTCACTCCCTCCTGGTACAGGAAGCCGGGACAGCCTGCCTGCTCTGAACACCAAGATCCTATATC
CAAGTGTTCGGGCAGGGATGTCTGGCTCCTTGCCAGGGGGCTCAGTCATCAGTCGCTTGTAAATTAATGC
TGATCCCTTAAATGCTGAACCTGAAAACCTAGAATACTACACAGAGAAGTGTGCATGAACAACTATTTT
GGCATTGGCTTGGATGCAAAGATATCTCTGGACTTCAACAACAAGCGTGATGAGCACCCAGAGAAATGCA
GGAGTAGGACTAAGAACATGATGTGGTATGGTGTCTTGGCACCAAGAGCTGCTGCACAGAACCTACAG
GAACCTGGAACAAAAGGTCTGTGGAGTGTGATGGCCGCCCTATCCCCTCCCGAGTCTCAAGGAATT
GCTGTCTCAACATCCCAGCTATGCTGGAGGGACCAACTTCTGGGGGGCACCAGGAAGATGATACTT
TTGCAGCTCCATCATTCCATGATAAGATTCTGGAGGTGGTTGCTGTGTTCCGGCAGCATGCAGATGGCTGT
GTCTCGTGAATTAAGCTACAGCATCATCGGATTGCCAGTGTCCACAGTGAAGATCTCCATCCTGGGG
GATGAAGGCGTGCCTGTGCAGGTGGATGGGGAAGCCTGGATCCAGCCACCTGGGTACATTCGGATCGTGC
ACAAGAACAGGGCGCAGACATTGACCAGAGACAGGGCCTTTGAAAACACCCTGAAGTCTTGGGAAGACAA
ACAGAAGTGTGAGCTGTCCC GCCACCCTCCTTTCCCTGCACCTGAGATCCTGTCTGAGGAGGAAGCT
ACCCAGATGGATCAGTTTGGGCAGGCAGCAGGGGGCCTCATTACAGCATTCCGGGAGATAGCACAGTCCC
ACAGAGCCATGGAACAGGAGCTCGCACATGCTGTCAATGCCAGCTCCAAGCCATGGAGCGAGTATACGG
CAAGCCCAGAACTGCAGAGGGTTGAAGTGTAGCTTTGTTTGGAGATGGTGAATAACATCAGAGCACTG
CGCAGTGAGACAGAGCTGCTGGCTGGGAAGATGGCCCTGCAATTGGATCCCCCTCAGAAGGAACGGC
TCGGGGCTGCCCTAATTGAGATGGACCAGCAGCTCAGGAAGCTGACAGACACTCCCTGGCTTTGCCAGCC
CTTGGAGCCTGGTGAAGAGTCTCTCCAACAGAATGTGATGCTGGATCTTACTAAACGCAGCCGTAGT
GGTAAATCCGCCTTGTGACCAAGTTTAAAAAGGAGAAAAACAATAAGAACAAAGAAGTTACAGTAACC
TAGGAGGCCCTGTTACCTCTGGGGACAGAGGAGTTGCTGCCTGGCTGGAGCACCTCAGTCTCTGTGA
GTATAAGGACATTTACGCGGCAGACATCCGGGGCTCTGAGCTCTGCACCTGGAGCGGAGGGACCTC
AAGGACCTTGGTGTGACCAAAGTGGCCATATGAAGAGGATCCTTTGTTGGATCAAGGAGCTGAGCCGGA
GCTCCCCTGCCGCCGAGGCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_177646

Insert Size: 3663 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_177646.3](#), [NP_808314.2](#)

RefSeq Size: 5694 bp

RefSeq ORF: 3663 bp

Locus ID: 227333

UniProt ID: [E9PUQ8](#)

Cytogenetics: 1 D

Gene Summary: Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:17021016). 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 (PubMed:17021016). By controlling the levels of diacylglycerol, regulates for instance the PKC and EGF receptor signaling pathways and plays a crucial role during development (PubMed:17021016). May also regulate clathrin-dependent endocytosis (By similarity).[UniProtKB/Swiss-Prot Function]