

Product datasheet for **RR201719**

Dhtkd1 (NM_001025720) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dhtkd1 (NM_001025720) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dhtkd1
Synonyms:	MGC116097
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR201719 representing NM_001025720
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCATCGGCTACTGTGGCAGCTGCAGGGAGAGCTCTCCGCCGAGCGGTCCCGCTTCTCAGGCGCAGTT
 ACCAGACGGAGAGGGGCGTCTATGGATACCGCCCTAGGAAAGCCGGGAGCGGCGAGCCCGAGGCGACCG
 TGCACGCCCTCAGTTGACCATGGCCTTCCAGGCTGGTACAGTGTATTGTGAGCATGGCCACAAAGCT
 GCCCAGATCAACCCTCTCTCCCGGACAAGCCCTCCTGGATACTGTGCCTGAAATCCAAGCTCTTGTGC
 AGACACTCCAGGGACCTTCACTACCACAGGACTGTAAACATGGGCAAAGAAGAGGCTTCTCTTGAGGA
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 GAAGAGATACGGAGGTGAAGGGGACAGAGCATGATGGGCTTTTTTACGAGTTGCTGAAATGTACGCC
 TATGGCGGTATAACGGACATCATTATCGGGATGCCCCACAGAGGGAGGCTGAATCTGTTGACAGGCCCTC
 TGCAGTTACCTCCAGAGCTGATGTTCCGTAATAATGCGAGGCTTAAAGTGAATTTCCAGAAAACGTTGCTGC
 CATTGGTGACGTCCTGTCCCATCTGACCTCCTCAGTGGACCTAGACTTTGGGGCCCATCGACCCCTCCAT
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 GGCAGCAGTCTCAGGAAGACGGGACTACTACCAAATGGTTCTGCTCAGCCTGGGGACAAAAGTCATATG
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 GGTGGTTTGCAGAACACTGATGATGTCTACATTCCTCTGAACCACATGGACCCTAACCCAGAAAGGCTTT
 CTGGAGGTTAGCAACAGCCCGCTGTGAGAAGAGGCTGCTTGGGATTTGAATACGGGATGAGCATCGAAA
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 GAAGCCATCCTCTCAAGACCTTCACTTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR201719 representing NM_001025720
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MASATVAAAGRALLRAVPLLRSSYQTERGVYGYRPRKAGSGEPRGDRARPSVDHGLARLVTVYCEHGHA
 AQINPLFPGQALLDTPVEIQALVQTLQGPFTTTGLLNMGKEEASLEEVLAYLNHIYCGPISIIETAQLQSQ
 EEKDFARRFEELKKETFTTEERKHLKLLLESQEFDFHFLATKFATVKRYGGEGAE SMMGFFHELLKLSA
 YGGITDIIIGMPHRGRLNLLTGLLQLPELMFRKMRGLSEFPENVAAGDVLSHLTSSVDLDFGAHRPLH
 VTMLPNPSHLEA INPVAVGKTRGRQSSQEDGDYSPNGSAQPGDKVICLQVHGDAFCGQGI VLETF LSN
 LPHFRIGGSIHLIVNQLGYTTPAERGRSSLYSSDIGKLVGCAIIHVNGDSPEEVVRATRLAFEYQRQFR
 KDVIIDLLCYRQWGHNELDEPFF TNPVYKII RARKSIPDTYAEHLIASGLMTQEEVSDIKASYAKLNG
 HLANVAHYSPPAPHLQARWQGLVQPAACVTTWDTGVPLELLRFVGVKSVEVPEELQLHSHLLKMYVQSRM
 EKVKNGTNDWATAETLALGSLLAQGFNVRLSGQDVGRGTF SQRHAMVVCQNTDDVYIPLNHMDPNQKGF
 LEVSN SPLSEEAVLGF EYGMSIESPKLLPLWEAQF GDF FNGAQIIFDTFISGGEAKWLLQSGLVILLPHG
 YDGAGDPDHSSCRIERFLQMCDSAE EGVSDTVNMFV VHP TTPAQYF HLLRRQMMRNFRKPLIVASPKMLL
 RYPVAVSTLEEMAPGTAFKPVIGDSSVDPKNVKT LIFCSGKH FYALLKQRESLGAKKRDFAIIRLEELCP
 FPLDSLQ QEMGKYKHVQDI IWSQE EPQNMGPWSFVYPRFEKQLACKLRL VSRPPLPAPAVGIGTVHQQH
 EAILFKFTFS

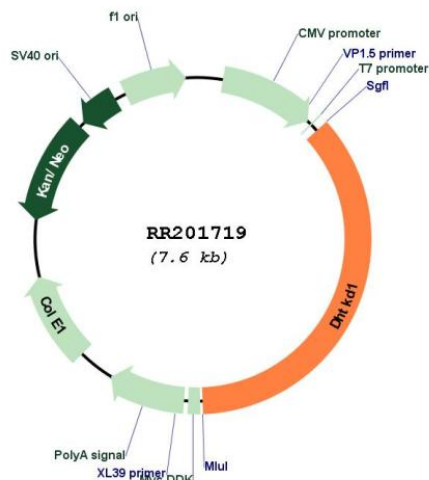
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001025720

ORF Size: 2760 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_001025720.1](#), [NP_001020891.1](#)

RefSeq Size: 4280 bp

RefSeq ORF: 2763 bp

Locus ID: 361272

UniProt ID: [Q4KLP0](#)

Cytogenetics: 17q12.3

MW: 102.6 kDa

Gene Summary: The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO₂. It contains multiple copies of three enzymatic components: 2-oxoglutarate dehydrogenase (E1), dihydrolipoamide succinyltransferase (E2) and lipoamide dehydrogenase (E3) (By similarity).[UniProtKB/Swiss-Prot Function]