

## Product datasheet for RC233222

### BCKDH kinase (BCKDK) (NM\_001271926) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	BCKDH kinase (BCKDK) (NM_001271926) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BCKDK
Synonyms:	BCKDKD; BDK
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC233222 representing NM_001271926 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGATCCTGGCGTCGGTGTGAGGAGCGGTCCCGGGGGCGGGCTCCGCTCCGGCCCTCCTGGGACCCG  
CACTCGCGCTCCGGGCCGCTCGACGTCGGCCACCGACACACCACGTGGAGATGGCTCGGGAGCGCTC  
CAAGACCGTCACCTCCTTTTACAACCAGTCGGCCATCGACGCGCAGCGGAGAAGCCCTCAGTCCGCTA  
ACGCCACCATGATGCTCTACGCTGGCCGCTCTCAGGACGGCAGCCACCTTCTGAAAAGTCTCGGTACC  
TGCAGCAAGAACTTCCAGTGAGGATTGCTCACCGCATCAAGGGCTTCCGCTGCCTTCTTTCATCATTGG  
CTGCAACCCACCATACTGCACGTGCATGAGCTATATATCCGTGCCTTCCAGAAGCTGACAGACTTCCCT  
CCGATCAAGGACCAGGCGGACGAGGCCAGTACTGCCAGCTGGTGCAGAGCTGCTGGATGACCACAAGG  
ATGTGGTGACCTCTTGGCAGAGGGCTACGTGAGAGCCGAAGCACATAGAGGATGAAAAGTCTCGTCCG  
CTACTTCTTGACAAGACGCTGACTTTCGAGGCTTGGAAATCCGCATGTTGGCCACGCATCACCTGGCGCTG  
CATGAGGACAAGCCTGACTTTGTGCGCATCATCTGTACTCGTCTCTCACCAAAGAAGATTATTGAGAAGT  
GGGTGGACTTTGCCAGACGCTGTGTGAGCACAAGTATGGCAATGCGCCCGTGTCCGCATCAATGGCCA  
TGTGGCTGCCCGTTCCCTTATCCCTATGCCACTGGACTACATCCTGCCGGAGCTGCTCAAGAATGCC  
ATGAGGATCTCAGACCGTGGTGGAGGAATCGCTCACAAGATCTGGACCGGGTCAATGGACTACCACTTCA  
CTACTGCTGAGGCCAGCACAGGACCCCGGATCAGCCCTCTTTGGCCATCTGGACATGCATAGTGG  
CGCCAGTCAGGACCCATGCACGGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001271926.2](#)

**RefSeq Size:** 2147 bp

**RefSeq ORF:** 1008 bp

**Locus ID:** 10295

**UniProt ID:** [O14874](#)

**Cytogenetics:** 16p11.2

**Protein Families:** Druggable Genome, Protein Kinase

**MW:** 38.2 kDa

**Gene Summary:** The branched-chain alpha-ketoacid dehydrogenase complex (BCKD) is an important regulator of the valine, leucine, and isoleucine catabolic pathways. The protein encoded by this gene is found in the mitochondrion, where it phosphorylates and inactivates BCKD. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2012]