

Product datasheet for **SC331120**

BCKDH kinase (BCKDK) (NM_001271926) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | BCKDH kinase (BCKDK) (NM_001271926) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | BCKDH kinase |
| Synonyms: | BCKDKD; BDK |
| Mammalian Cell Selection: | Neomycin |
| Vector: | <u>PCMV6-Neo</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >NCBI ORF sequence for NM_001271926, the custom clone sequence may differ by one or more nucleotides |

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ATGATCCTGGCGTCGGTCTGAGGAGCGGTCCCGGGGGCGGGCTCCGCTCCGGCCCTCCTGGGACCCG
CACTCGCGCTCCGGGCCCGCTCGACGTCGGCCACCGACACACACCACGTGGAGATGGCTCGGGAGCGCTC
CAAGACCGTCACCTCCTTTACAACCAAGTCGGCCATCGACCGCGCAGCGGAGAAGCCCTCAGTCCGCCTA
ACGCCCACCATGATGCTCTACGCTGGCCGCTCTCAGGACGGCAGCCACCTTCTGAAAAGTCTCGGTACC
TGCAGCAAGAACTCCAGTGAGGATTGCTCACCGCATCAAGGGCTCCGCTGCCTTCCTTTCATCATTGG
CTGCAACCCACCATACTGCACGTGCATGAGCTATATCCGTGCCTCCAGAAGCTGACAGACTCCCT
CCGATCAAGGACCAGGCGGACGAGGCCAGTACTGCCAGCTGGTGGCAGCTGCTGGATGACCACAAGG
ATGTGGTGACCTCTTGCAAGAGGCTACGTGAGAGCCGGAAGCACATAGAGGATGAAAAGCTCGTCCG
CTACTTCTTGACAAGACGCTGACTTCGAGGCTTGAATCCGCATGTTGGCCACGCATCACCTGGCGCTG
CATGAGGACAAGCCTGACTTTGTCGGCATCATCTGTAAGTCTCTCACCAAAGAAGATTATTGAGAAGT
GGTGGACTTTGCCAGACGCCTGTGTGAGCACAAGTATGGCAATGCGCCCGTGTCCGCATCAATGGCCA
TGTGGCTGCCGGTCCCTTTCATCCCTATGCCACTGGACTACATCCTGCCGGAGCTGCTCAAGAATGCC
ATGAGGATCTCAGACCGTGGTGGAGGAATCGCTCACAAGATCTGGACCGGGTCTGGACTACCCTTCA
CTACTGCTGAGGCCAGCACAGGACCCCGGATCAGCCCCCTTTGGCCATCTGGACATGCATAGTGG
CGCCCAGTCAGGACCCATGCACGGGTGA
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| Restriction Sites: | Sgfl-MluI |
| ACCN: | NM_001271926 |



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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 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](#)

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_001271926.1](#), [NP_001258855.1](#)

RefSeq Size: 2147 bp

RefSeq ORF: 1008 bp

Locus ID: 10295

UniProt ID: [O14874](#)

Cytogenetics: 16p11.2

Protein Families: Druggable Genome, Protein Kinase

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]

Transcript Variant: This variant (3) retains an alternate exon in the 3' coding sequence and lacks an alternate in-frame exon compared to variant 1. The resulting isoform (c) is shorter at the C-terminus and lacks an alternate internal segment compared to isoform a.