

Product datasheet for **SC318839**

BCKDH kinase (BCKDK) (NM_001122957) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCKDH kinase (BCKDK) (NM_001122957) Human Untagged Clone
Tag:	Tag Free
Symbol:	BCKDH kinase
Synonyms:	BCKDKD; BDK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC318839 representing NM_001122957. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGATCCTGGCGTCGGTCTGAGGAGCGGTCCCGGGGGCGGGCTCCGCTCCGGCCCTCCTGGGACCC
GCACTCGCGTCCGGGCCGCTCGACGTCGGCCACCGACACACCACGTTGGAGATGGCTCGGGAGCGC
TCCAAGACCGTCACCTCCTTTTACAACCGTCCGGCCATCGACGCGGCAGCGGAGAAGCCCTCAGTCCGC
CTAACGCCACCATGATGCTCTACGCTGGCCGCTCTCAGGACGGCAGCCACCTTCTGAAAAGTGTCCG
TACCTGCAGCAAGAACTCCAGTGAGGATTGCTCACCGCATCAAGGGCTCCGCTGCCTTCTTTTATC
ATTGGCTGCAACCCACCATACTGCACGTGCATGAGCTATATCCGTGCCTTCCAGAAGCTGACAGAC
TTCCCTCCGATCAAGGACCAGGCGGACGAGGCCAGTACTGCCAGCTGGTGCAGAGCTGCTGGATGAC
CACAAGGATGTGGTGACCCTCTTGGCAGAGGGCTACGTGAGAGCCGGAAGCACATAGAGGATGAAAAG
CTCGTCCGCTACTTCTTGGACAAGACGCTGACTTCGAGGCTTGGAAATCCGCATGTTGGCCACGCATCAC
CTGGCGTGATGAGGACAAGCCTGACTTTGTCCGCATCATCTGTACTCGTCTCTACCAAGAAGATT
ATTGAGAAGTGGGTGGACTTTGCCAGACGCTGTGTGAGCACAAGTATGGCAATGCGCCCGTGTCCGC
ATCAATGGCCATGTGGCTGCCGGTCCCTTTCATCCCTATGCCACTGGACTACATCCTGCCGGAGCTG
CTCAAGAATGCCATGAGAGCCACAATGGAGAGTCACTAGACACTCCCTACAATGTCCAGATGTGGTC
ATCACCATGCCAACAATGATGTCGATCTGATCATCAGGATCTCAGACCGTGGTGGGAATCGCTCAC
AAAGATCTGGACCGGTCATGGACTACCACTTCACTACTGCTGAGGCCAGCACACAGGACCCCGGATC
AGCCCCCTCTTTGGCCATCTGGACATGCATAGTGGCGCCAGTCAGGACCCATGCACGGGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites:	SgfI-MluI
ACCN:	NM_001122957



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Insert Size:	1098 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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_001122957.2
RefSeq Size:	2237 bp
RefSeq ORF:	1098 bp
Locus ID:	10295
UniProt ID:	O14874
Cytogenetics:	16p11.2
Protein Families:	Druggable Genome, Protein Kinase
MW:	41.1 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]

Transcript Variant: This variant (2) retains an intron in the 3' end of the coding sequence compared to variant 1. The resulting isoform (b) is shorter at the C-terminus compared to isoform a.