

Product datasheet for **RG203601**

BCKDH kinase (BCKDK) (NM_005881) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCKDH kinase (BCKDK) (NM_005881) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BCKDH kinase
Synonyms:	BCKDKD; BDK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203601 representing NM_005881 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCCTGGCGTCGGTCTGAGGAGCGGTCCCGGGGGCGGGCTCCGCTCCGGCCCTCCTGGGACCCG
CACTCGCGCTCCGGGCCCGCTCGACGTCGGCCACCGACACACACCACGTGGAGATGGCTCGGAGCGCTC
CAAGACCGTCACCTCCTTTACAACCAGTCGGCCATCGACCGGCAGCGGAGAAGCCCTCAGTCCGCTA
ACGCCACCATGATGCTCTACGCTGGCCGCTCTCAGGACGGCAGCCACCTTCTGAAAAGTCTCGGTACC
TGCAGCAAGAACTCCAGTGAGGATTGCTCACCAGCATCAAGGGCTCCGCTGCCTTCCTTTCATCATTGG
CTGCAACCCACCATACTGCACGTGCATGAGCTATATATCCGTGCCTTCCAGAAGCTGACAGACTCCCT
CCGATCAAGGACCAGGCGGACGAGGCCAGTACTGCCAGCTGGTGCAGAGCTGTGGATGACCACAAGG
ATGTGGTGACCTCTTGGCAGAGGGCTACGTGAGAGCCGGAAGCACATAGAGGATGAAAAGCTCGTCCG
CTACTTCTGGACAAGACGCTGACTTCGAGGCTTGAATCCGCATGTTGGCCACGCATCACTGGCGCTG
CATGAGGACAAGCCTGACTTTGTGGCATCATCTGTAAGTCTCTACCAAGAAGATTATTGAGAAGT
GGGTGGACTTTGCCAGACGCCTGTGTGAGCACAAGTATGGCAATGCGCCCGTGTCCGCATCAATGGCCA
TGTGGCTGCCCGTTCCCTTTCATCCCTATGCCACTGGACTACATCCTGCCGGAGCTGCTCAAGAATGCC
ATGAGAGCCACAATGGAGAGTCACCTAGACACTCCCTACAATGTCCCAGATGTGGTCATCACCATCGCCA
ACAATGATGTCGATCTGATCATCAGGATCTCAGACCGTGGTGGAGGAATCGCTCACAAAGATCTGGACCG
GGTTCATGGACTACCACTTCACTACTGCTGAGGCCAGCACAGGACCCCGGATCAGCCCTCTTTGGC
CATCTGGACATGCATAGTGGCGCCAGTCAGGACCCATGCACGGCTTTGGCTTCGGGTTGCCACGTCAC
GGGCTACGCGGAGTACCTCGGTGGTCTCTGCAGCTGCAGTCCCTGCAGGGCATTGGCACGGACGCTCTA
CCTGCGGCTCCGCCACATCGATGGCCGGGAGGAAAGCTTCCGGATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG203601 representing NM_005881
 Red=Cloning site Green=Tags(s)

MILASVLRSGPGGGLPLRPLLGPALALRARSTSATDTHHVEMARERSKTVTSFYNQSAIDAAAEEKPSVRL
 TPTMMLYAGRSQDGSLLKSAARYLQQELPVRIAHRIKGFRCCLPFIIGCNPTILHVHLEYIRAFQKLTDFP
 PIKDQADEAQYQQLVRQLDDHKDQVVTLLAAGLRESRKHIEDEKLVRYFLDKLTSRLGIRMLATHHLAL
 HEDKPDFVGIICTRLSPKKIIEKWVDFARRLCEHKYGNAPRVRINGHVAARFPFIPMLDYILPELLKNA
 MRATMESHLDTPYNVPDVVITIANNDVLDLIIRISDRGGGIAHKDLDRVMDYHFTTAEASTQDPRISPLFG
 HLDMHSGAQSGPMHGFGLPSTRAYAEYLGSLQLQSLQGIGTDVYLRRLRHIDGREESFRI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005881

ORF Size: 1236 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_005881.4](#)

RefSeq Size: 1890 bp

RefSeq ORF: 1239 bp

Locus ID: 10295

UniProt ID: [O14874](#)

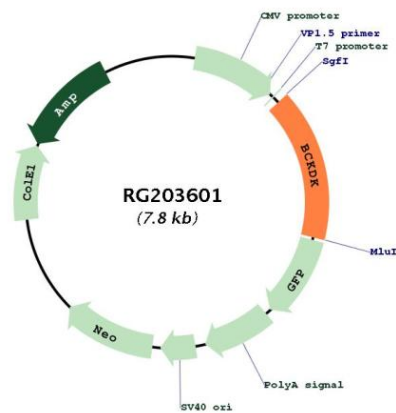
Cytogenetics: 16p11.2

Domains: HATPase_c

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]

Product images:



Circular map for RG203601