

## Product datasheet for **RG225553**

### **BCKDH kinase (BCKDK) (NM\_001122957) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	BCKDH kinase (BCKDK) (NM_001122957) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BCKDK
Synonyms:	BCKDKD; BDK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225553 representing NM_001122957 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATCCTGGCGTCGGTCTGAGGAGCGGTCCCGGGGGCGGGCTCCGCTCCGGCCCTCCTGGGACCCG  
CACTCGCGCTCCGGGCCCGCTCGACGTCGGCCACCGACACACACCACGTGGAGATGGCTCGGGAGCGCTC  
CAAGACCGTCACCTCCTTTACAACCAGTCGGCCATCGACCGGCAGCGGAGAAGCCCTCAGTCCGCCTA  
ACGCCACCATGATGCTCTACGCTGGCCGCTCTCAGGACGGCAGCCACCTTCTGAAAAGTCTCGGTACC  
TGCAGCAAGAACTCCAGTGAGGATTGCTCACCGCATCAAGGGCTCCGCTGCCTTCCTTTCATCATTGG  
CTGCAACCCACCATACTGCACGTGCATGAGCTATATATCCGTGCCTTCCAGAAGCTGACAGACTCCCT  
CCGATCAAGGACCAGGCCGACGAGGCCAGTACTGCCAGCTGGTGCACAGCTGTGGATGACCAAGG  
ATGTGGTGACCTCTTGGCAGAGGGCTACGTGAGAGCCGGAAGCACATAGAGGATGAAAAGCTCGTCCG  
CTACTTCTGGACAAGACGCTGACTTCGAGGCTTGAATCCGCATGTTGGCCACGCATCACTGGCGCTG  
CATGAGGACAAGCCTGACTTTGTCGGCATCATCTGTACTCGTCTCTACCAAAGAAGATTATTGAGAAGT  
GGGTGGACTTTGCCAGACGCCTGTGTGAGCACAAGTATGGCAATGCGCCCGTGTCCGCATCAATGGCCA  
TGTGGCTGCCCGTTCCCTTTCATCCCTATGCCACTGGACTACATCCTGCCGGAGCTGCTCAAGAATGCC  
ATGAGAGCCACAATGGAGAGTCACCTAGACACTCCCTACAATGCCAGATGTGGTCATCACCATCGCCA  
ACAATGATGTCGATCTGATCATCAGGATCTCAGACCGTGGTGGAGGAATCGCTCACAAGATCTGGACCG  
GGTCATGGACTACCACTTCACTACTGCTGAGGCCAGCACAGGACCCCGGATCAGCCCTCTTTGGC  
CATCTGGACATGCATAGTGGCGCCAGTCAGGACCCATGCACGGG

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTAA



[View online »](#)

**Protein Sequence:** >RG225553 representing NM\_001122957  
Red=Cloning site Green=Tags(s)

MILASVLRSGPGGGLPLRPLLGPALALRARSTSATDTHHVEMARERSKTVTSFYNQSAIDAAAEEKPSVRL  
 TPTMMLYAGRSQDGSLLKSAARYLQQELPVRIAHRIKGFRCCLPFIIGCNPTILHVHLEYIRAFQKLTDFP  
 PIKDQADEAQYQQLVRQLDDHKDVVTLAAGLRESRKHIEDEKLVRYFLDKTLTSRLGIRMLATHHLAL  
 HEDKPDFVGIICTRLSPKKIIEKWVDFARRLCEHKYGNAPRVRINGHVAARFPFIPMLDYILPELLKNA  
 MRATMESHLDTPYNVPDVVITIANNDVLIIRISDRGGGIAHKDLDRVMDYHFTTAEASTQDPRISPLFG  
 HLDMHSGAQSGPMHG

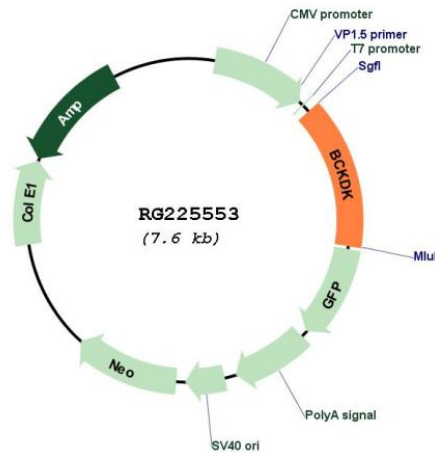
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001122957

<b>ORF Size:</b>	1095 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001122957.3</a>
<b>RefSeq Size:</b>	2190 bp
<b>RefSeq ORF:</b>	1098 bp
<b>Locus ID:</b>	10295
<b>UniProt ID:</b>	<a href="#">O14874</a>
<b>Cytogenetics:</b>	16p11.2
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Gene Summary:</b>	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]