

Product datasheet for **SC118943**

DBT (NM_001918) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DBT (NM_001918) Human Untagged Clone
Tag:	Tag Free
Symbol:	DBT
Synonyms:	BCATE2; BCKAD-E2; BCKADE2; BCKDH-E2; BCOADC-E2; E2; E2B
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001918, the custom clone sequence may differ by one or more nucleotides

```
ATGGCTGCAGTCCGTATGCTGAGAACCTGGAGCAGGAATGCGGGGAAGCTGATTTGTGTTTCGCTATTTTC
AAACATGTGGTAATGTTTCATGTTTTGAAGCCAAATTATGTGTGTTTCTTTGGTTATCCTTCATTCAAGTA
TAGTCATCCACATCACTTCTGAAAACAACTGCTGCTCCTCGTGGACAGGTTGTTTCAGTTCAAGCTCTCA
GACATTGGAGAAGGGATTAGAGAAGTAAGTGTAAAGAATGGTATGTAAGAAGGAGATACAGTGTCTC
AGTTTGATAGCATCTGTGAAGTCAAAAGTATAAAGCTTCTGTTACCATCACTAGTCGTTATGATGGAGT
CATTAAAAAAGCTATTATAATCTAGACGATATTGCCTATGTGGGGAAGCCATTAGTAGACATAGAAACG
GAAGCTTTAAAAGATTGAGAAGAAGATGTTGTTGAAACTCCTGCAGTGTCTCATGATGAACATACACACC
AAGAGATAAAGGGCCGAAAAACTGGCAACTCCTGCAGTTCCGCGTCTGGCAATGGAACAATATTTAA
GCTGAGTGAAGTTGTTGGCTCAGGAAAAGATGGCAGAATACTTAAGAAGATATCCTCAACTATTTGGAA
AAGCAGACAGGAGCTATATTGCCTCCTCACCCAAAGTTGAAATTATGCCACCTCCACCAAGCCAAAAG
ACATGACTGTTTCTATACTAGTATCAAAACCTCCGGTATTCACAGGCAAAGACAAAACAGAACCCATAAA
AGGCTTTCAAAAAGCAATGGTCAAGACTATGTCTGCAGCCCTGAAGATACCTCATTGTTGTTATTTGAT
GAGATTGACCTTACTGAACTGGTTAAGCTCCGAGAAGAATTAACCCATTGCATTTGCTGTTGGAATTA
AACTCTCCTTTATGCCTTTCTTCTTAAAGGCTGCTTCTTGGGATTACTACAGTTTCTATCCTTAACGC
TTCTGTGGATGAAAAGTCCAGAAATATAACATATAAGGCTTCTCATAACATTGGGATAGCAATGGATACT
GAGCAGGGTTTGATTGTCCTAATGTGAAAAATGTTTCAGATCTGCTCTATTTTGACATCGCCACTGAAC
TGAACCGCCTCCAGAAATGGGCTCTGTGGTCTGAGCTCAGCACCAGTATCTTACAGGAGGAACATTTAC
TCTTTCCAACATTGGATCAATTTGGTGGTACCTTTGCCAAACCAGTATAATGCCACCTGAAGTAGCCATT
GGGGCCCTTGATCAATTAAGGCCATTCCTCGATTTAACAGAAAGGAGAAGTATAAGGCACAGATAA
TGAATGTGAGCTGGTCTGATCACAGAGTATTGATGGTGTACAATGTCACGCTTCTCCAATTTGTG
GAAATCCTATTTAGAAAACCCAGCTTTTATGCTACTAGATCTGAAATGA
```



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_001918 unedited TAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTGCAGTCCGTATGCTGA GAACCTGGAGCAGGAATGCGGGGAAGCTGATTTGTGTTTCGCTATTTTCAAACATGTGGTA ATGTTTCATGTTTTGAAGCAAATATGTGTGTTTCTTTGGTTATCCTTCATTCAAGTATA GTCATCCACATCACTTCTGAAAACAACCTGCTGCTCTCCGTGGACAGGTTGTTCAAGTTCA AGCTCTCAGACATTGGAGAAGGGATTAGAGAAGTAACTGTTAAAGAATGGTATGTAAAAG AAGGAGATACAGTGTCTCAGTTTGATAGCATCTGTGAAGTTCAAAGTGATAAAGCTTCTG TTACCATCACTAGTCGTTATGATGGAGTCATTAATAAAGCTTATTATAATCTAGACGATA TTGCCTATGTGGGAAGCCATTAGTAGACATAGAAACGGAAGCTTTAAAAGATTGAGAAG AAGATGTTGTTGAAACTCCTGCAGTGTCTCATGATGAACATACACCAAGAGATAAAGG GCCGAAAAACTGGCAACTCCTGCAGTTCGCCGTCTGGCAATGGAAAACAATATTAAGC TGAGTGAAGTTGTTGGCTCAGGAAAAGATGGCAGAATACTTANAGAAGATATCCTCAACT ATTTGAAAAGCAGACAGGAGCTATATTGCCTNCTTCAACCAAGTTGAAATATGCCACCT NCACAAAGCCAAAGACATGACTGTCCTATACTAGTATCAAACCTCCGTATCACAGGCAA GACAAACAGAACCATAAAAGGCTTCAAAGCATGGTCAAGACTTGTCTGCAGCCTGAGAT ACCTATTTTGGTTATGNGAGAAATGACCTACTGACTGGNTAGCTCGAAAAATAAACCCA TGCT
3' Read Nucleotide Sequence:	>OriGene 3' read for NM_001918 unedited AGACTCATGGTCGCTGCCGAATCCANGATCAGTTTTTTTTTTTTTTTTTTTGGAGACAAAT GTTGCTCTGCCACCCAGGCTGGAGTGCAGTGGTGTGATCTCTGCTCACTGTAACCTCCAC CTCTTGGGCTCAAGCAATTCCTGCCTCAGCCTCCCAAGTAGCTGGACTACAGGCGTG TGCCACCAGGCCAGGTAATTTTTTGTATTTTACAAAACGTAGAGATGGGGTTTACC ATGTGGCCAGGGTGGTCTCGAACTCCTGACCTCAGGTGATCTGGCCACCTGGGCTCCC AAAGTGTGGGATTACAGGCGTGAGCCACCAGGCTAATTTTAAAAATAATGTTTTTTGAG ATGGGATCTCACTATGTTGCCAGGCTGGTCTCAAACCTCCTGGCCTCAAGTGATCCTCCT GGTTCAGCCTCCCTATAAAGTGGGATTACAGTTACAAGTCATCACACCTGGCTGATTTA TTCTTTCTGATTTTAAATATTTCCATTTTGGGAAAAACCAAGTTGATTTTAAACAA CCTTTTTTCTGGCACAAAACCTTGCCTTAAACAATAATTTTGGCATAACAGGTTTCAACTG GACCAATTAGAAACAACCTGGGATTTCCGAAAGCCAATGGAAATGGTGGAAACAATTATCC CGGTCCTTTTTCTGAGTAAGTGGACCTTTTACAAAATGGTCTTTTGTGAAACCTTCGTTT CCATACAAAAGTCTCATTTTTTTATCCTTAATACCATTAAGCTTTTCTTCTCCTGGT AAGGAACATTTTACCCCGCATCTGGGTAATGAATAGACCCTAATTTTATAAACCGATT TTTAAGGCGGAGACCCATAAGTTAATATGGGAGTGCCTTCTCATTTTTTTTGATAAA AACAAAATCGGTGGGTGCCTAT
Restriction Sites:	NotI-NotI
ACCN:	NM_001918
Insert Size:	3670 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
RefSeq:	NM_001918.1 , NP_001909.1
RefSeq Size:	10831 bp
RefSeq ORF:	1449 bp
Locus ID:	1629

UniProt ID:	P11182
Domains:	biotin_lipoyl, 2-oxoacid_dh, e3_binding
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Valine, leucine and isoleucine degradation
Gene Summary:	<p>The branched-chain alpha-keto acid dehydrogenase complex (BCKD) is an inner-mitochondrial enzyme complex involved in the breakdown of the branched-chain amino acids isoleucine, leucine, and valine. The BCKD complex is thought to be composed of a core of 24 transacylase (E2) subunits, and associated decarboxylase (E1), dehydrogenase (E3), and regulatory subunits. This gene encodes the transacylase (E2) subunit. Mutations in this gene result in maple syrup urine disease, type 2. Alternatively spliced transcript variants have been described, but their biological validity has not been determined. [provided by RefSeq, Jul 2008]</p>