

Product datasheet for **MR207721**

Dbt (NM_010022) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dbt (NM_010022) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dbt
Synonyms:	BCKAD-E2; D3Wsu60e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR207721 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGCAGCGGTGTACTGAGGACCTGGAGCCAGAACGCTGTCAGACTGACCTGTGTTGCTATTTTC
 AGACATTTAATAGCGCCCGTGTGTTGAAGCCAAAATGTGTGTGCTCTGTGGGTTATCCATTGTTCAAGTA
 CAGTCAGCCACGTCACCTCCGAGAACAGCGGCCGTGCTCCAGGACAGGTTGTTCAAGTCAAACCTCC
 GACATCGGAGAAGGAATTCGAGAAGTAATAAAGAATGGTATGTAAGAAGGAGATACGGTGTCTC
 AGTTTGACAGCATCTGTGAAGTCAAAGTGACAAGGCCTCTGTCACCATCACCAGCCGTTACGATGGCAT
 CATTAAGAGGCTCTATTACAATCTAGATGATATCGCTTATGTGGGAAACCAGTATCGACATTGAGACA
 GAAGCTTTAAAGGATTGAGAGGAAGATGTTGTTGAAACCCCGCTGTGCCATGATGAGCACACTCACC
 AAGAGATAAAAGGCCAGAAAACACTAGCAACGCCTGCAGTGCCTGGCTGGCAATGGAAAACAATATTAA
 GCTGAGTGAAGTTGTTGGCTCAGGAAAAGATGGCAGAATACTTAAGAAGATATTCTCAGCTTTTGGAA
 AAGCAGACAGGAGCCATACTGCCTCCCTACCAAAATCTGAAATCACACCACCTCCACCAGCCAAAAG
 ACAGGACCTTTCCACGCGATAGCAAAGCCTCCAGTGTTCACAGGCAAAGACCGAACAGAGCCAGTGAC
 AGGCTTCCAGAAGGCAATGGTGAAGACCATGTCTGCAGCCCTGAAGATCCCCACTTCGGGTATTGTGAT
 GAGATTGACCTTACTCAACTGGTTAAGCTTCGAGAAGAGCTGAAACCTGTTGCTTTGGCGGTGGAATCA
 AACTCTCCTTCATGCCCTTCTTCTAAAGGCTGCTTCTCTGGGACTCCTGCAGTTTCTATCCTCAATGC
 CTCGGTGGACGAGAAGTCCAGAACATCACCTACAAGGCTTCTCAACATTGGGATAGCAATGGACT
 GAGTGGGGTTAATTGTCCCAATGTGAAGAAGCTTCAAGTCCGCTCTGTATTTGAGATCGCCATGGAAC
 TGAACCGCTCCAGAACTGGGCTCTCCGGTCAAGTACCACCGACCTTACAGGAGGACATTTAC
 TCTTTCCAAACATTGGATCAATCGGTGGAACCTATGCCAAGCCAGTGATATTGCCACCGGAAGTAGCCATT
 GGTGCCCTGGGAGCGATTAAGGCTTCCCGATTTGACCAGAAAGGAGACGTTTATAAAGCACAGATAA
 TGAATGTGAGCTGGTCAAGGATCACAGGGTATCGATGGGGCCACCATGTACGCTTCTCTAATTTGTG
 GAAATCTACTTAGAAAACCCAGCGTTTATGCTGCTGGATCTGAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207721 protein sequence
 Red=Cloning site Green=Tags(s)

MAAARVLRWTSQNAVRLTCVRYFQTFNSARVLKPKCVCSVGYPLFKYSQPRHSLRTAAVLQGQVVQFKLS
 DIGEGIREVTIKEWYVKEGDTVVSQFDSICEVQSDKASVTITSRYDGIKRLYYNLDDIAYVGKPLIDIET
 EALKDSEEDVVETPAVSHDEHHEIKGQKTLATPAVRRLAMENNIKLEVVVSGKDRILKEDILSFLE
 KQTGAILPPSPKSEITPPPPQPKDRFTPTPIAKPPVFTGKDRTEPVTGFQKAMVKTMSAALKIPHFGYCD
 EIDLTLQVLKREELKPVALARGIKLSFMPFFLKAASLGLLQFPILNASVDENCQNITYKASHNIGIAMDT
 ELGLIVPNVKNVQVRSVFEIAMELNRLQKLGSSGQLGTTDLTGGTFTLSNIGSIGGTYAKPVILPPEVAI
 GALGAIKALPRFDQKGDVYKAQIMNVSWSADHRVIDGATMSRFSNLWKSYLENPAFMLLDLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_010022

ORF Size: 1449 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_010022.1](#), [NM_010022.2](#), [NM_010022.3](#), [NP_034152.1](#)
RefSeq Size: 3292 bp

RefSeq ORF: 1449 bp

Locus ID: 13171

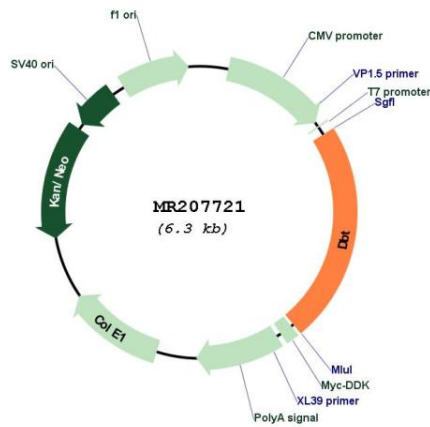
UniProt ID: [P53395](#)

Cytogenetics: 3 50.37 cM

MW: 53.3 kDa

Gene Summary: The branched-chain alpha-keto dehydrogenase complex catalyzes the overall conversion of alpha-keto acids to acyl-CoA and CO(2). It contains multiple copies of three enzymatic components: branched-chain alpha-keto acid decarboxylase (E1), lipoamide acyltransferase (E2) and lipoamide dehydrogenase (E3). Within this complex, the catalytic function of this enzyme is to accept, and to transfer to coenzyme A, acyl groups that are generated by the branched-chain alpha-keto acid decarboxylase component.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207721