

Product datasheet for **MG207721**

Dbt (NM_010022) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Dbt (NM_010022) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Dbt |
| Synonyms: | BCKAD-E2; D3Wsu60e |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MG207721 representing NM_010022
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCTGCAGCGGTGTACTGAGGACCTGGAGCCAGAACGCTGTCAGACTGACCTGTGTTGCTATTTTC
 AGACATTTAATAGCGCCCGTGTGTTGAAGCCAAAATGTGTGTGCTCTGTGGGTTATCCATTGTTCAAGTA
 CAGTCAGCCACGTCACCTCCGAGAACAGCGGCCGTGCTCCAGGACAGGTTGTTCAAGTCAAACCTCC
 GACATCGGAGAAGGAATTCGAGAAGTAATAAAGAATGGTATGTAAGAAGGAGATACGGTGTCTC
 AGTTTGACAGCATCTGTGAAGTCAAAGTGACAAGGCCTCTGTCACCATCACCAGCCGTTACGATGGCAT
 CATTAAGAGGCTCTATTACAATCTAGATGATATCGCTTATGTGGGAAACCAGTATCGACATTGAGACA
 GAAGCTTTAAAGGATTGAGAGGAAGATGTTGTTGAAACCCCGCTGTGCCATGATGAGCACACTCACC
 AAGAGATAAAAGGCCAGAAAACACTAGCAACGCCTGCAGTCCGCTGGCAATGGAAAACAATATTA
 GCTGAGTGAAGTTGTTGGCTCAGGAAAAGATGGCAGAATACTTAAGAAGATATTCTCAGCTTTTGGAA
 AAGCAGACAGGAGCCATACTGCCTCCCTACCAAAATCTGAAATCACACCACCTCCACCAGCCCAAAG
 ACAGGACCTTTCCACGCGGATAGCAAAGCCTCCAGTGTTCACAGGCAAAGACCGAACAGAGCCAGTGAC
 AGGCTTCCAGAAGGCAATGGTGAAGACCATGTCTGCAGCCCTGAAGATCCCCACTTCGGGTATTGTGAT
 GAGATTGACCTTACTCAACTGGTTAAGCTTCGAGAAGAGCTGAAACCTGTTGCTTTGGCGCGTGGAAATCA
 AACTCTCCTTCATGCCCTTCTTCTAAAGGCTGCTTCTCTGGGACTCCTGCAGTTTCTATCCTCAATGC
 CTCGGTGGACGAGAAGTCCAGAACATCACCTACAAGGCTTCTCACAACATTGGGATAGCAATGGACT
 GAGTGGGGTTAATTGTCCCAATGTGAAGAACGTTGAGTCCGCTCTGTATTTGAGATCGCCATGGAAC
 TGAACCGCCTCCAGAACTGGGCTCTCCGGTCAGCTCGGTACCACCGACCTTACAGGAGGACATTTAC
 TCTTTCCAACATTGGATCAATCGGTGGAACCTATGCCAAGCCAGTGATATTGCCACGGAAGTAGCCATT
 GGTGCCCTGGGAGCGATTAAGGCTTCCCGATTGACCAGAAAGGAGACGTTTATAAAGCACAGATAA
 TGAATGTGAGCTGGTCAGCGGATCACAGGGTCATCGATGGGGCCACCATGTCACGCTTCTAATTTGTG
 GAAATCTACTTAGAAAACCCAGCGTTTATGCTGCTGGATCTGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207721 representing NM_010022
 Red=Cloning site Green=Tags(s)

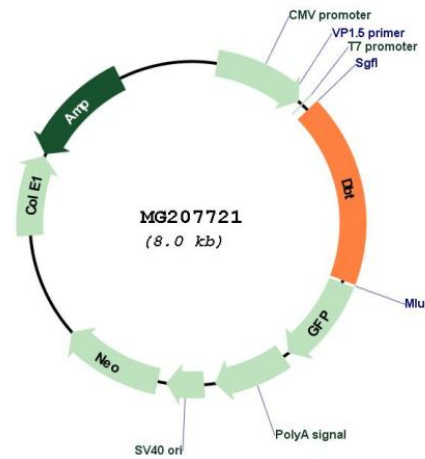
MAAARVLRWTSQNAVRLTCVRYFQTFNSARVLKPKCVCSVGYPLFKYSQPRHSLRTAAVLQGQVVQFKLS
 DIGEGIREVTIKEWYVKEGDTVVSQFDSICEVQSDKASVTITSRYDGIKRLYYNLDDIAYVGKPLIDMET
 EALKDSEEDVVETPAVSHDEHTEIKGQKTLATPAVRRLAMENNIKLEVVVSGKDGRIKEDILSFLE
 KQTGAILPPSPKSEITPPPPQPKDRTFPTPIAKPPVFTGKDRTEPVTGFQKAMVKTMSAALKIPHFYCD
 EIDLTLQVLKREELKPVALARGIKLSFMPFFLKAASLGLLQFPILNASVDENCQNITYKASHNIGIAMDT
 ELGLIVPNVKNVQVRSVFEIAMELNRLQKLGSSGQLGTTDLTGGTFTLSNIGSIGGTYAKPVILPPEVAI
 GALGAIKALPRFDQKGDVYKAQIMNVSWSADHRVIDGATMSRFSNLWKSYLENPAFMLLDLK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_010022

ORF Size: 1446 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](#), [NP_034152.1](#)

RefSeq Size: 2664 bp

RefSeq ORF: 1449 bp

Locus ID: 13171

UniProt ID: [P53395](#)

Cytogenetics: 3 50.37 cM

Gene Summary: The branched-chain alpha-keto dehydrogenase complex catalyzes the overall conversion of alpha-keto acids to acyl-CoA and CO₂. 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]