

## Product datasheet for **MR206032**

### **Bcat1 (NM\_007532) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Bcat1 (NM_007532) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bcat1
Synonyms:	BCATc; Eca39
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206032 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGGACTGCAGTAATGGATGCTCCGCGCCGTTTGGCTGGAGAAAGAGGATCAGAAGAAGTGGCGGAGA  
CTTTTAGGGCCAAAGATCTCATCATCACACCAGCCACTGTCTTAAAGAGAAGCCGGACCCGGATTTCGCT  
GGTCTTTGGAGCTACGTTTACTGACCACATGCTGACGGTGGAGTGGTCTCTGCGTCTGGATGGGAGAAA  
CCTCACATTAAGCCTTTGGAACTTGGCCATACATCCCGCTGCCTCTGTTTTGCACTACGCTGTGGAAC  
TGTTTGAAGGCTTGAAAGCCTTTGGGGAGTTGATAACAAGATCCGATTGTTCCGGCCGGACCTCAACAT  
GGATAGAATGTGCCGATCTGCTGTGAGGACCACGCTGCCGATGTTTGACAAGGAGGAGCTCTAAAGTGT  
ATTCTTCAGCTTCTACAGATCGACCAAGAATGGGTTCCCTACTCCACCTCTGCCAGCCTCTACATCCGCC  
CCACATTTATCGGAAGTGGACCTCTCTTGGCGTCAAGAAGCCTTCCAAAGCCCTACTCTTTGTGATCCT  
GAGCCCGTGGGACCTTATTTTCTAGTGGATCTTTACTCCGGTGTCCCTGTGGGCAATCCAAAGTAT  
ATCAGAGCCTGGAAAGTGGGACTGGAGACTGCAAGATGGGCGGCAATTATGGAGCCTCCCTTCTGGCAC  
AGTGCGAGGCCGCGGAGAATGGCTGTGAGCAGGTCCTGTGGCTGTACGGCAAGGACAACCAGATAACTGA  
AGTAGGCACAATGAATCTTTCCCTACTGGATAAACGAAGACGGAGAAGAGGAGCTGGCAACGCCCCCA  
CTAGATGGCATATTCTCCAGGAGTGACCAGGCAGAGCATCTGGAGCTGGCACAACAGTGGGGTGAGT  
TTAAGGTATGTGAGAGACCTCACCATGGATGACCTGGCCACCGCCCTTGAGGGGAACAGAGTGAAGGA  
GATGTTCCGGCTCAGGGACAGCCTGCGTTGTCTGCCAGTCTCTGATATTCTGTACAAGGGCCAGATGCTG  
CATATTCCAACGATGGAGAATGGCCCAAGCTTGAAGTCAAGTCAAGTCTGGGAAAGCTGACTGATATCCAGT  
ATGGAAGGTGGAGAGTGACTGGACAATCGAGCTACCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR206032 protein sequence  
Red=Cloning site Green=Tags(s)

MKDCSNGCSAPFAGERGSEEVAETFRAKDLIITPATVLKEKPPDPSLVFGATFTDHMLTVEWSSASGWK  
 PHIKPFGNLP IHPAASVLHYAVELFEGLKAFRGVDNKIRLFRPDLNMDRMCRAVTRTTLPMFDKEELLKC  
 ILQLLQIDQEWVPYSTASLYIRPTFFIGTEPSLGVKKPSKALLFVILSPVGPYFSSGSFTPVSLWANPKY  
 IRAWKGGTGDCKMGGNYGASLLAQCEAAENGCCQVLWL YGKDNQI TEVGTMNLFPYWINEDGEEELATPP  
 LDGIILPGVTRQSILELAQQWGEFVKVRCERHLMDDDLATALEGNRVKEMFGSGTACVVCVSDILYKQML  
 HIPTMENGPKLASRILGKLTDIQYGRVESDWTIELP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_007532

**ORF Size:** 1161 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\\_007532.3](#)

**RefSeq Size:** 7868 bp

**RefSeq ORF:** 1161 bp

**Locus ID:** 12035

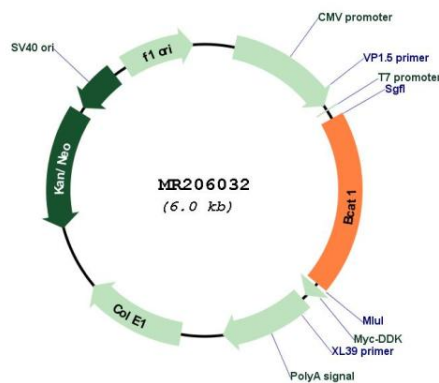
**UniProt ID:** [P24288](#)

**Cytogenetics:** 6 77.27 cM

**MW:** 42.7 kDa

**Gene Summary:** Catalyzes the first reaction in the catabolism of the essential branched chain amino acids leucine, isoleucine, and valine.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR206032