

Product datasheet for RC229999

BCAT1 (NM_001178093) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCAT1 (NM_001178093) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BCAT1
Synonyms:	BCATC; BCT1; ECA39; MECA39; PNAS121; PP18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229999 representing NM_001178093 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGCCCGCTTCGCTCCGCTGCGGCCCTTGCCCGCCAGGATTGCAGTAACGGATGCTCCGAGAGT
GTACCGGAGAAGGAGGATCAAAAGAGGTGGTGGGACTTTAAGGCTAAAGACCTAATAGTCACACCAGC
TACCATTTAAAGGAAAAACCAGACCCCAATAATCTGGTTTTTGGAACTGTGTTCCAGGATCATATGCTG
ACGGTGGAGTGGTCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGCCTCTTCAGAACCTGTCATTGC
ACCCTGGCTCATCAGCTTGCATATGCAGTGGAAATTTTGAAGGATTGAAGGCATTTTCGAGGAGTAGA
TAATAAAATTCGACTGTTTCAGCCAAACCTCAACATGGATAGAATGTATCGCTCTGCTGTGAGGGCAACT
CTGCCGTATTTGACAAAGAAGAGCTCTTAGAGTGTATTCAACAGCTTGTGAAATTTGGATCAAGAATGGG
TCCCATATTCAACATCTGCTAGTCTGTATATTCGTCCTACATTCAATGGAAGTGGACCTTCTCTGGAGT
CAAGAAGCCTACCAAAGCCCTGCTTTGTACTCTTGAGCCAGTGGGACCTTATTTTTCAAGTGGAAACC
TTAATCCAGTGTCCCTGTGGCCAATCCCAAGTATGTAAGAGCCTGAAAGGTGGAAGTGGGACTGCA
AGATGGGAGGGAATTACGGCTCATCTCTTTTGCCTAATGTAAGAGCCTGAAAGGTGGAAGTGGGACTGCA
CCTGTGGCTCTATGGAGAGGACCATCAGATCACTGAAGTGGAACTATGAATCTTTTTCTTACTGGATA
AATGAAGATGGAGAAGAAGAAGTGGCAACTCTCCACTAGATGGCATATTCTTCAGGAGTGACAAGGC
GGTGCAATCTGGACCTGGCACATCAGTGGGGTGAATTTAAGGTGTCAGAGAGATACCTCACCATGGATGA
CTTGACAACAGCCCTGGAGGGGAACAGAGTGAGAGAGATGTTTGGCTCTGGTACAGCCTGTGTTGTTTGC
CCAGTTTCTGATATACTGTACAAAGCGGAGACAATACACATTCCAATATGGAGAATGGTCTAAGCTGG
CAAGCCGCATCTTGAGCAAATTAAGTATCCAGTATGGAAGAGAAGAGAGCGACTGGACAATTGTGCT
ATCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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_001178093.2](#)

RefSeq ORF: 1197 bp

Locus ID: 586

UniProt ID: [P54687](#)

Cytogenetics: 12p12.1

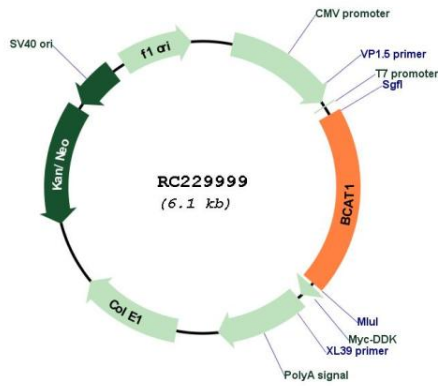
Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Pantothenate and CoA biosynthesis, Valine, leucine and isoleucine biosynthesis, Valine, leucine and isoleucine degradation

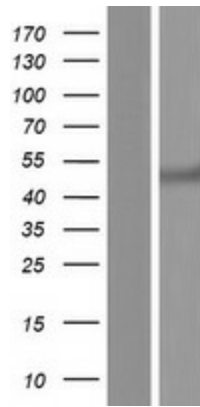
MW: 44.6 kDa

Gene Summary: This gene encodes the cytosolic form of the enzyme branched-chain amino acid transaminase. This enzyme catalyzes the reversible transamination of branched-chain alpha-keto acids to branched-chain L-amino acids essential for cell growth. Two different clinical disorders have been attributed to a defect of branched-chain amino acid transamination: hypervalinemia and hyperleucine-isoleucinemia. As there is also a gene encoding a mitochondrial form of this enzyme, mutations in either gene may contribute to these disorders. Alternatively spliced transcript variants have been described. [provided by RefSeq, May 2010]

Product images:



Circular map for RC229999



Western blot validation of overexpression lysate (Cat# [LY432999]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229999 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).