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Product datasheet for SC123478

BCAT1 (BC033864) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCAT1 (BC033864) Human Untagged Clone
Tag:	Tag Free
Symbol:	BCAT1
Synonyms:	BCATC; BCT1; ECA39; MECA39; PNAS121; PP18
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

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Fully Sequenced ORF:

>OriGene sequence for BC033864 edited
GGTGGATGCTGCGGCATCGGAGGACCCTGCTGGTGGAGGAAATGGTTCACGCCCGTCCCC
GTTCCCTTTGCAGGCTTGCTATTGTGCGTCTGTGATTGACAAGACCACGAGGCTGAGCGC
GCCCTGGAGATTTTTCTATAAATGGCTTAACACCCCAGTCTAGACTATTTGCTCGGATAT
AAGGGAGACAATTGTTTTTTTGTTCTTTGCCGGCGAACCCTGGCTCTGTAGGGCTGACCT
GGAATTTAACCAGTCTTCCCTGAGCCGGCGGAGGAGGACAAAAACCGCCGCGACCCCGGC
AGGGTGGGAAGTGCAGGGCAGCGCTCCCAAGACACGCTTGTTGGAGGTTCGGGCCTGGGT
GCTTGGTTGTCTGAGCCTCCTTTTTTGTGTTTGCCTGGGTCCTGGAGAGGAGCGCACGGT
ATCATGGATTGCAGTAACGGATGCTCCGCAGAGTGTACCGGAGAAGGAGGATCAAAAGAG
GTGGTGGGGACTTTTAAGGCTAAAGACCTAATAGTCACACCAGCTACCATTTTAAAGGAA
AAACCAGACCCCAATAATCTGGTTTTTGGAACTGTGTTCACGGATCATATGCTGACGGTG
GAGTGGTCCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGCCTCTTCAGAACCTGTCA
TTGCACCCTGGCTCATCAGCTTTGCACTATGCAGTGGAATTATTTGAAGGATTGAAGGCA
TTTCGAGGAGTAGATAATAAAATTCGACTGTTTCAGCCAAACCTCAACATGGATAGAATG
TATCGCTCTGCTGTGAGGGCAACTCTGCCGGTATTTGACAAAGAAGAGCTCTTAGAGTGT
ATTCAACAGCTTGTGAAATTGGATCAAGAATGGGTCCCATATTCAACATCTGCTAGTCTG
TATATTCGTCCTACATTCATTGGAACTGAGCCTTCTCTTGGAGTCAAGAAGCCTACCAAA
GCCCTGCTCTTTGTACTCTTGAGCCCAGTGGGACCTTATTTTTCAAGTGGAACCTTTAAT
CCAGTGTCCCTGTGGGCCAATCCCAAGTATGTAAGAGCCTGGAAAGGTGGAACTGGGGAC
TGCAAGATGGGAGGGAATTACGGCTCATCTCTTTTTGCCCAATGTGAAGCAGTAGATAAT
GGGTGTCAGCAGGTCCTGTGGCTCTATGGAGAGGACCATCAGATCACTGAAGTGGGAACT
ATGAATCTTTTTCTTTACTGGATAAATGAAGATGGAGAAGAAGAACTGGCAACTCCTCCA
CTAGATGGCATCATTCTTCCAGGAGTGACAAGGCGGTGCATTCTGGACCTGGCACATCAG
TGGGACACAGAACTCAGCTTGTTTTCAATTAATTTGCCTGATTTTCTGCAGTTCATTTAC
TTTTGAACAACATAATTGCAATTGTAGACTGAGAGAAATTGAAACTTTCAAAGAGCCATA
TTTCTATTGCAGATATATTTTCCTGCTCTTCCAAATCTACTTACAGCATGAGTTCTTCTT
TTAAATATTCAAATATTTTGAATATTGCCAAGAGCTTTGATTTCCATTTTTATCTCTTGT
GGGTTTATAAATTAAGAAAAAATACTCATCTTATTTTTTTAAACCTCTCTATTTTTATTG
CCCTTTATTCAAATAACTTGTTGACAAACTTTGAACTTGAACCACTGAGGTAAAAGAACA
AGAATTAAACAGATAGTTTAAACACATAGCTTAAAAGGATCTTTTTCCCATTTCCTATCC
TTGAGCAAAGAATATATTCAAACACTTTGGCAGAAGTCAATGAGGTTATACCACTAATTC
CATGATGAAAATCAACTGAATGTGATACTGAAAGAGAAGGAAGAGAATTGTCACTGTAAA
GTCAACTGTTAGTCATATTAGGAAAAAAAATACATACAATACAATTTCTCAAATAAAGTC
CAAATATACATTCAATGTTTAAAAATAATGAGTATTTCAGATATTTGAACTCAGTCTGTT
CTTTATTCCATAAAAGATATAGGTAAGCCGTGCACGGTGGCTCACAACTATAATCCCAGC
ACTTTGGCACTTTGGGAGGCTGAGGTGGGAGGATCACATGAGCCCAGCCTGGGCAACATA
GGGAGACCGCTATCTTTACAAAATAAAATATAAAATATAAAACCTAGTTGGGCATGGCAG
CATACACCTGTAGTCCCAGGTGCTCGGGAGACTGAGACAGGAGGATCGCTTGGGCCTGGG
AGGTCGAGGCTGCAGTGAGCCAAGATTATGCCACTGCATTCCAGCCTGGGTGACAGGGCA
AGACCCTGTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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5' Read Nucleotide Sequence:

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>OriGene 5' read for BC033864 unedited
CCGTTCCGCATAGNAAACNATCATATAGGCGGCCGCCATTCCCGGGAGGTGGATGCTGCG
GCATCGGAAGACCCTGCTGGTGGAGGAAATGGTTCACGCCCGTCCCCGTTCCCTTTGCAG
GCTTGCTATTGTGCGTCTGTGATTGACAAGACCACGAGGCTGAGCGCGCCCTGGAGATTT
TTCTATAAATGGCTTAACACCCCAGTCTAGACTATTTGCTCGGATATAAAGGAGACAATT
GTTTTTTTGTTCTTTGCCGGCGAACCCTGGCTCTGTAGGGCTGACCTGGAATTTAACCAG
TCTTCCCTGAGCCGGCGGAGGAGGACAAAAACCGCCGCGACCCCGGCAGGGTGGGAAGTG
CAGGGCAGCGCTCCCAAGACACCGCTTGTTGGAAGTTCGGGCCTGAGTGCTTGGTTGTCT
GAGCCTCCTTTTTTGTGTTTGCCTGGGTCCTGGAGAGGAGCGCACGGTATCATGGATTGC
AGTAACGGATGCTCCGCAGAGTGTACCGGATAAGGAGGATCAAAAGAAGTGGTGGGGACT
TTTAAAGGCTAAAAACCTAATATTCACACCAGCTACCATTTTAAAGAAAAACCAGACCCC
ATAATCTGGTTTTTGGAACTGGGTTCACGGATCATATGCTGACGGTGGATTGGGTCTCAG
AGTTTGGATGGGAGAAACCCTATATCAAGCCTTTTTAGAAACTTGGTCTTGCACCCTGGC
TTATAAGCTTTTGCACCATGCATGGGAATTCTTTGAAGATTGGAAGGCATTTCCAAGAGT
AAATAATTAAAATTCGCTGGTTTAGNCCTAACCTCAACATGGAAAAAAAGGATTCATCCG
GTGGGAAGGGAAATTTGCCGGGATTTTGAAAAAAAAGAACCCTTTAAGTGTATTTAAAAA
CTTGGGAAAATTGGTN
```

Restriction Sites: Please inquire

ACCN: BC033864

Insert Size: 2321 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).

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: BC033864.1

RefSeq Size: 2321 bp

Locus ID: 586

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

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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]

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