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Product datasheet for SC328637

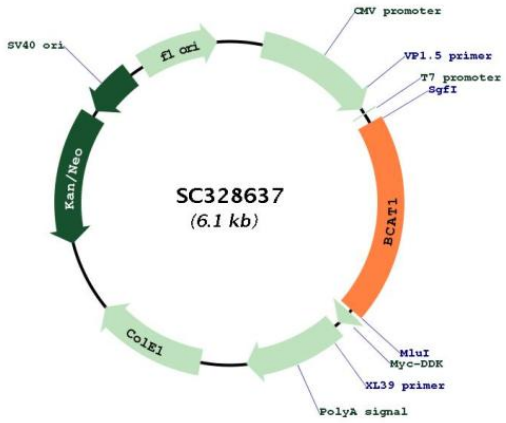
BCAT1 (NM_001178093) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCAT1 (NM_001178093) Human Untagged Clone
Tag:	Tag Free
Symbol:	BCAT1
Synonyms:	BCATC; BCT1; ECA39; MECA39; PNAS121; PP18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328637 representing NM_001178093. Blue=Insert sequence Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGCCAGCCCGCTTCGCTCCGCTGCGGCCCTTGCCCGCCAGGATTGCAGTAACGGATGCTCCGCAGAG TGTACCGGAGAAGGAGGATCAAAAGAGGTGGTGGGGACTTTTAAGGCTAAAGACCTAATAGTCACACCA GCTACCATTTTAAAGGAAAAACCAGACCCCAATAATCTGGTTTTTGGAACTGTGTTCACGGATCATATG CTGACGGTGGAGTGGTCCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGCCTCTTCAGAACCTGTCA TTGCACCCTGGCTCATCAGCTTTGCACTATGCAGTGGAATTATTTGAAGGATTGAAGGCATTTCGAGGA GTAGATAATAAAATTCGACTGTTTCAGCCAAACCTCAACATGGATAGAATGTATCGCTCTGCTGTGAGG GCAACTCTGCCGGTATTTGACAAAGAAGAGCTCTTAGAGTGTATTCAACAGCTTGTGAAATTGGATCAA GAATGGGTCCCATATTCAACATCTGCTAGTCTGTATATTCGTCCTACATTCATTGGAACTGAGCCTTCT CTTGGAGTCAAGAAGCCTACCAAAGCCCTGCTCTTTGTACTCTTGAGCCCAGTGGGACCTTATTTTTCA AGTGGAACCTTTAATCCAGTGTCCCTGTGGGCCAATCCCAAGTATGTAAGAGCCTGGAAAGGTGGAACT GGGGACTGCAAGATGGGAGGGAATTACGGCTCATCTCTTTTTGCCCAATGTGAAGCAGTAGATAATGGG TGTCAGCAGGTCCTGTGGCTCTATGGAGAGGACCATCAGATCACTGAAGTGGGAACTATGAATCTTTTT CTTTACTGGATAAATGAAGATGGAGAAGAAGAACTGGCAACTCCTCCACTAGATGGCATCATTCTTCCA GGAGTGACAAGGCGGTGCATTCTGGACCTGGCACATCAGTGGGGTGAATTTAAGGTGTCAGAGAGATAC CTCACCATGGATGACTTGACAACAGCCCTGGAGGGGAACAGAGTGAGAGAGATGTTTGGCTCTGGTACA GCCTGTGTTGTTTGCCCAGTTTCTGATATACTGTACAAAGGCGAGACAATACACATTCCAACTATGGAG AATGGTCCTAAGCTGGCAAGCCGCATCTTGAGCAAATTAACTGATATCCAGTATGGAAGAGAAGAGAGC GACTGGACAATTGTGCTATCCTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
Restriction Sites:	SgfI-MluI

View online »

Plasmid Map:



ACCN:	NM_001178093
Insert Size:	1197 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001178093.1
RefSeq Size:	9278 bp
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:	44.1 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] Transcript Variant: This variant (4) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (4) has a distinct N-terminus and is longer than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.