

Product datasheet for RC219229L2

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OriGene Technologies, Inc.

BCAT1 (NM_005504) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: BCAT1 (NM_005504) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: BCAT1

Synonyms: BCATC; BCT1; ECA39; MECA39; PNAS121; PP18

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC219229).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_005504

ORF Size: 1158 bp

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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: <u>NM 005504.4</u>

RefSeq Size: 8191 bp RefSeq ORF: 1161 bp

Locus ID: 586

UniProt ID: P54687

Cytogenetics: 12p12.1

Domains: aminotran 4

Protein Families: Druggable Genome

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

biosynthesis, Valine, leucine and isoleucine degradation

MW: 42.8 kDa

Gene Summary: This gene encodes the cytosolic form of the enzyme branched-chain amino acid

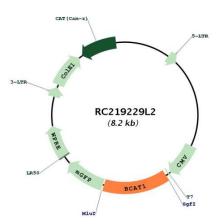
transaminase. This enzyme catalyzes the reversible transamination of branched-chain alphaketo acids to branched-chain L-amino acids essential for cell growth. Two different clinical disorders have been attributed to a defect of branched-chain amino acid transamination: hypervalinemia and hyperleucine-isoleucinemia. 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 RC219229L2