

## Product datasheet for RC219229L2V

## OriGene Technologies, Inc.

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## **BCAT1 (NM\_005504) Human Tagged ORF Clone Lentiviral Particle**

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** BCAT1 (NM\_005504) Human Tagged ORF Clone Lentiviral Particle

Symbol: BCAT1

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

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_005504 **ORF Size:** 1158 bp

**ORF Nucleotide** 

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

OTI Disclaimer:

Sequence:

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.

**RefSeg:** NM 005504.4

 RefSeq Size:
 8191 bp

 RefSeq ORF:
 1161 bp

 Locus ID:
 586

 UniProt ID:
 P54687

Cytogenetics: 12p12.1

**Domains:** aminotran\_4

**Protein Families:** Druggable Genome





## BCAT1 (NM\_005504) Human Tagged ORF Clone Lentiviral Particle - RC219229L2V

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]