BCAT1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	BCAT1, Polyclonal Antibody
Full Product Name	BCAT1 Antibody
Product Gene Name	anti-BCAT1 antibody
Product Synonym Names	BCT1; PP18; BCATC; ECA39; MECA39; PNAS121
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Rabbit IgG in pH7.4 PBS, 0.05% NaN3, 40% Glycerol.
Purity/Purification	Antigen affinity purification.
Specificity	The antibody detects endogenous levels of total BCAT1 protein.
Preparation and Storage	Store at 4 degree C short term. Aliquot and store at -20 degree C long term. Avoid freeze/thaw cycles.
Molecular Weight	386
OMIM	113520
3D Structure	ModBase 3D Structure for P54687
Immunogen	Fusion protein corresponding to a region derived from internal residues of human branched chain amino-acid transaminase 1, cytosolic
Product Categories/Family for anti-BCAT1 antibody	Primary Antibody
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-BCAT1 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-BCAT1 antibody	WB: 1:200-1:1000 IHC: 1:25-1:100
Related Product Information for anti-BCAT1 antibody	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
Other Notes	Small volumes of anti-BCAT1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for BCAT1 purchase	MBS8589626 is an antibody targeting BCAT1. Also known as BCAT1 Antibody. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for BCAT1. It may not necessarily be applicable to this product.

NCBI GI #	215274162
NCBI GeneID	586
NCBI Accession #	P54687.3
UniProt Primary Accession #	P54687
UniProt Secondary Accession #	Q68DQ7; Q96MY9; B3KY27; B7Z2M5; B7Z5L0; F5H5E4
UniProt Related Accession #	P54687
NCBI Official Full Name	Branched-chain-amino-acid aminotransferase, cytosolic
NCBI Official Synonym Full Names	branched chain amino-acid transaminase 1, cytosolic
NCBI Official Symbol	BCAT1
NCBI Official Synonym Symbols	BCT1; PP18; BCATC; ECA39; MECA39; PNAS121
UniProt Protein Name	Branched-chain-amino-acid aminotransferase, cytosolic
UniProt Synonym Protein Names	Protein ECA39
Protein Family	Branched-chain-amino-acid aminotransferase
UniProt Gene Name	BCAT1
UniProt Synonym Gene Names	BCT1; ECA39; BCAT(c)
UniProt Entry Name	BCAT1_HUMAN
NCBI Protein Information	branched-chain-amino-acid aminotransferase, cytosolic; placental protein 18; branched chain aminotransferase 1, cytosolic
NCBI Summary for BCAT1	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]
UniProt Comments for BCAT1	BCAT1: Catalyzes the first reaction in the catabolism of the essential branched chain amino acids leucine, isoleucine, and valine. Belongs to the class-IV pyridoxal-phosphate-dependent aminotransferase family. 4 isoforms of the human protein are produced by alternative splicing. Protein type: EC 2.6.1.42; Amino Acid Metabolism - valine, leucine and isoleucine biosynthesis; Cofactor and Vitamin Metabolism - pantothenate and CoA biosynthesis; Amino Acid Metabolism - valine, leucine and isoleucine degradation; Transferase Chromosomal Location of Human Ortholog: 12p12.1 Cellular Component: mitochondrion; cytosol Molecular Function: identical protein binding; branched-chain-amino-acid transaminase activity Biological Process: cell proliferation; branched chain family amino acid catabolic process; branched chain family amino acid biosynthetic process; G1/S transition of mitotic cell cycle
Research Articles on BCAT1	**1.** levels of branched-chain aminotransferase-1 (BCAT1) transcripts are significantly decreased on the polysomes of both RPS19 and RPL11 cells and that translation of BCAT1 protein is especially impaired in cells with small RP gene mutations
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