

#### **BCAT1 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10147c

#### Specification

# **BCAT1** Antibody (Center) - Product Information

Application Primary Accession Other Accession	IHC-P, WB,E <u>P54687</u> <u>P54690</u> , <u>P24288</u> , <u>NP_001171563.1</u> , <u>NP_001171562.1</u> , <u>NP_005495.2</u> , <u>NP_001171564.1</u> , <u>NP_001171565.1</u> , <u>O9GKM4</u>
Reactivity	Human
Predicted	Mouse, Rat, Sheep
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42966
Antigen Region	81-107

## **BCAT1** Antibody (Center) - Additional Information

Gene ID 586

**Other Names** Branched-chain-amino-acid aminotransferase, cytosolic, BCAT(c), Protein ECA39, BCAT1, BCT1, ECA39

# **Target/Specificity** This BCAT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 81-107 amino acids from the Central region of human BCAT1.

**Dilution** IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

BCAT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **BCAT1 Antibody (Center) - Protein Information**



Name BCAT1

Synonyms BCT1, ECA39 {ECO:0000303|PubMed:8692959}

**Function** Catalyzes the first reaction in the catabolism of the essential branched chain amino acids leucine, isoleucine, and valine.

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P54690}.

**Tissue Location** 

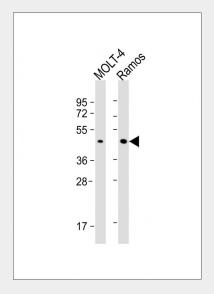
During embryogenesis, expressed in the brain and kidney. Overexpressed in MYC-induced tumors such as Burkitt's lymphoma

## **BCAT1** Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

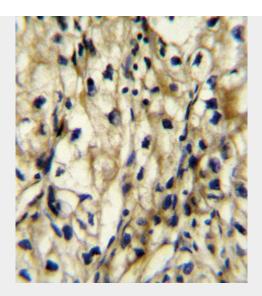
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **BCAT1 Antibody (Center) - Images**



All lanes : Anti-BCAT1 Antibody (Center) at 1:1000 dilution Lane 1: MOLT-4 whole cell lysate Lane 2: Ramos whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





BCAT1 Antibody (Center) (Cat. #AP10147c) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the BCAT1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# BCAT1 Antibody (Center) - Background

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.

# **BCAT1 Antibody (Center) - References**

Eijgelsheim, M., et al. Hum. Mol. Genet. 19(19):3885-3894(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Barber, M.J., et al. PLoS ONE 5 (3), E9763 (2010) : Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)