

**Anti-BCAT1 Antibody**  
Catalog # ABO10856**Specification**

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**Anti-BCAT1 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P54687</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Branched-chain-amino-acid aminotransferase, cytosolic(BCAT1) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-BCAT1 Antibody - Additional Information**

**Gene ID** 586

**Other Names**

Branched-chain-amino-acid aminotransferase, cytosolic, BCAT(c), 2.6.1.42, Protein ECA39, BCAT1, BCT1, ECA39

**Calculated MW**

42966 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cytoplasm.

**Tissue Specificity**

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

**Protein Name**

Branched-chain-amino-acid aminotransferase, cytosolic(BCAT(c))

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human BCAT1(360-375aa KLASRILSKLTDIQYGR), different from the related mouse sequence by one amino acid, rat sequence

by three amino acids.

#### **Purification**

Immunogen affinity purified.

#### **Cross Reactivity**

No cross reactivity with other proteins

Storage

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

### **Anti-BCAT1 Antibody - 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**

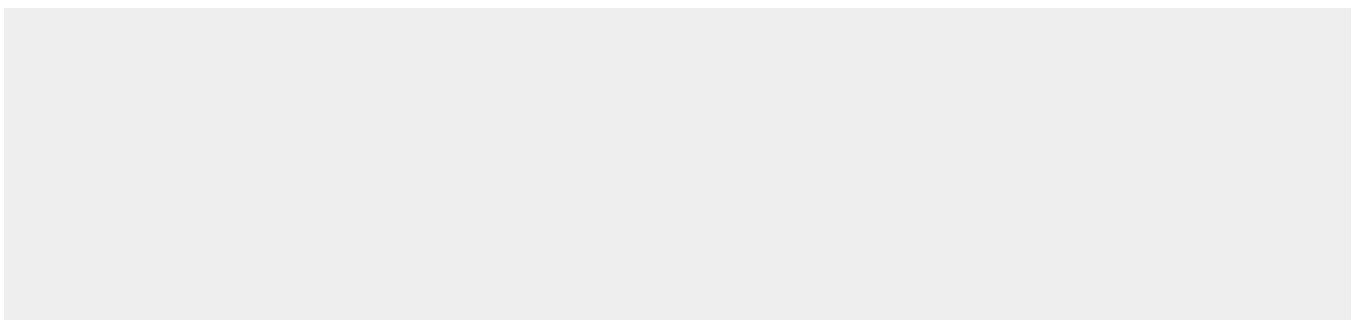
During embryogenesis, expressed in the brain and kidney. Overexpressed in MYC-induced tumors such as Burkitt's lymphoma

### **Anti-BCAT1 Antibody - Protocols**

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

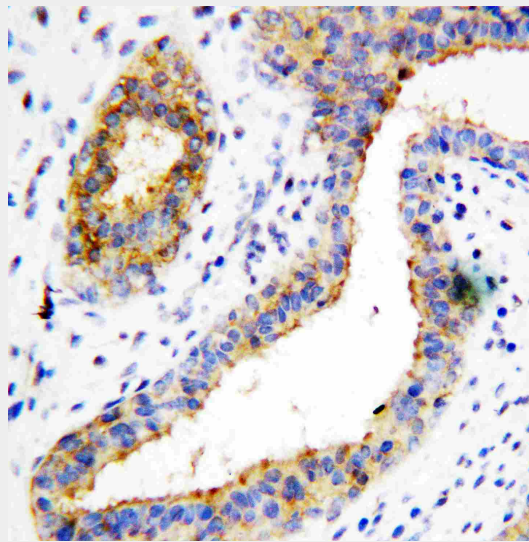
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Anti-BCAT1 Antibody - Images**





Anti-BCAT1 antibody, ABO10856, Western blotting All lanes: Anti BCAT1 (ABO10856) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: JURKAT Whole Cell Lysate at 40ug Predicted bind size: 45KD Observed bind size: 45KD



Anti-BCAT1 antibody, ABO10856, IHC(P) IHC(P): Human Mammary Cancer Tissue

#### **Anti-BCAT1 Antibody - Background**

BCAT1, Branched-chain Aminotransferase1, is also known as BCT1. The BCAT1 gene is highly expressed early in embryogenesis, and during organogenesis its expression is localized to the neural tube, the somites, and the mesonephric tubules. The gene is also expressed in several MYC-based tumors. The BCAT1 gene is mapped to chromosome 12. Lack of the enzyme BCT can cause auxotroph, a kind of auxotrophic mutant in Chinese-hamster ovary cells that lacks the ability to grow if alpha-ketoisovaleric acid, alpha-ketoisocaproic acid, and alpha-keto-beta-methylvaleric acid are substituted for valine, leucine, and isoleucine in the culture medium.