

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

Anti-BCAT1 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P54687
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

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
Western blot, 0.1-0.5 µg/ml, Human

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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}.

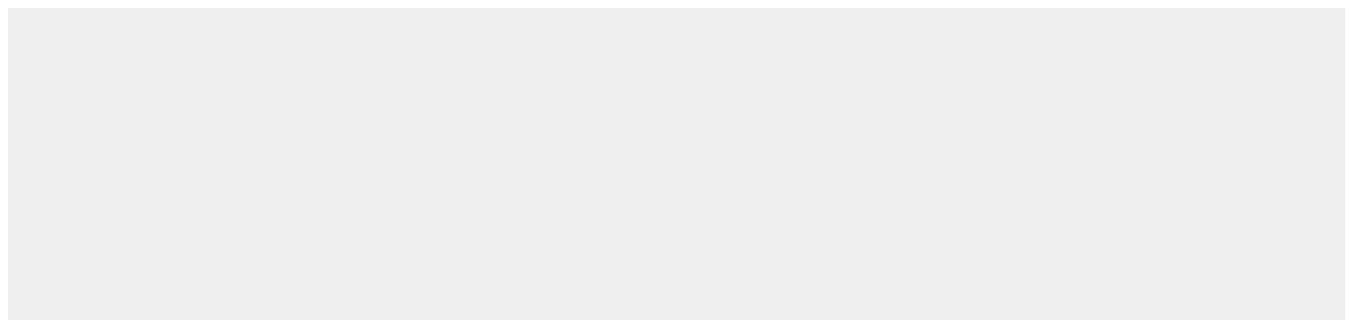
Tissue Location

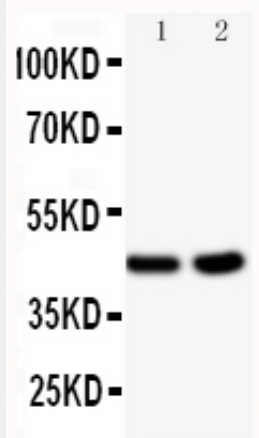
During embryogenesis, expressed in the brain and kidney. Overexpressed in MYC-induced tumors such as Burkitt's lymphoma

Anti-BCAT1 Antibody - Protocols

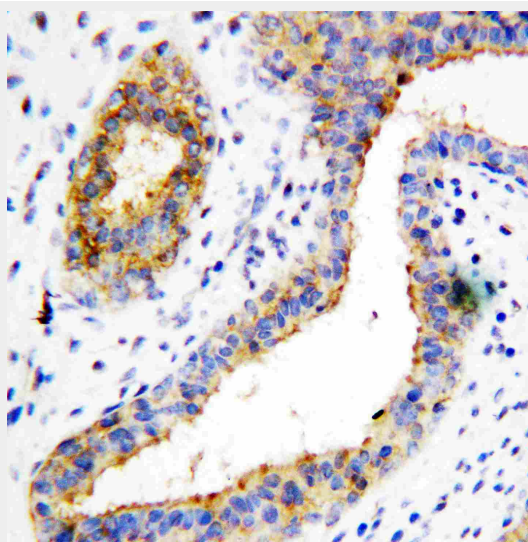
Provided below are standard protocols that you may find useful for product applications.

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

Anti-BCAT1 Antibody - Images



Anti-BCAT1 antibody, ABO10856, Western blottingAll lanes: Anti BCAT1 (ABO10856) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 45KDObserved 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.