

For Research Use Only

# BCAT2 Polyclonal antibody

Catalog Number: 16417-1-AP

Featured Product

27 Publications



## Basic Information

### Catalog Number:

16417-1-AP

### Size:

150ul, Concentration: 267 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9573

### GenBank Accession Number:

BC001900

### GeneID (NCBI):

587

### UNIPROT ID:

O15382

### Full Name:

branched chain aminotransferase 2, mitochondrial

### Calculated MW:

44 kDa

### Observed MW:

38-42 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:20-1:200

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : HepG2 cells, MCF-7 cells, LO2 cells, Jurkat cells, Raji cells

IHC : human skin tissue, human placenta tissue

IF/ICC : C2C12 cells,

## Background Information

Branched-chain amino acid transaminase 2 (BCAT2) is an important enzyme in branched-chain amino acids (BCAAs) catabolism that reversibly catalyzes the initial step of BCAA degradation to branched-chain acyl-CoA. In humans, BCAT2 encodes a mitochondrial protein that is ubiquitously expressed in all organs (except hepatocytes) (PMID:32467562). Moreover, other reports showed that overexpressed BCAT2 in pancreatic ductal adenocarcinoma (PDAC) cells enhanced cell proliferation and survival in vitro and in vivo (PMID:35663242).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yukari Shida	34845278	Sci Rep	WB
Dongdong Yang	36417878	Cell Rep	WB
Yang Yang	34084135	Front Pharmacol	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

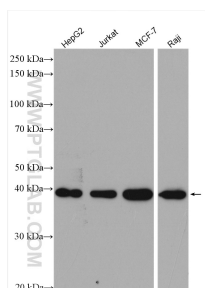
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

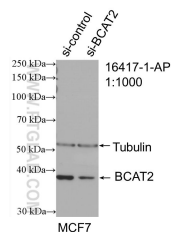
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

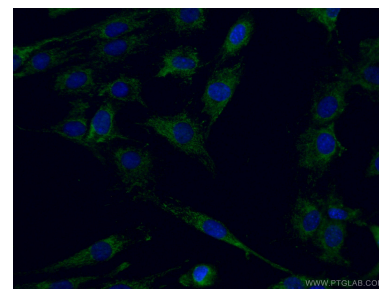
## Selected Validation Data



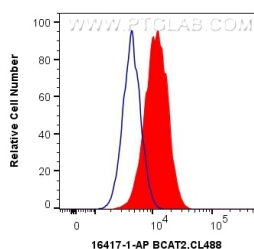
Various lysates were subjected to SDS PAGE followed by western blot with 16417-1-AP (BCAT2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



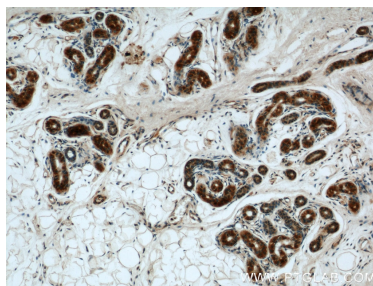
WB result of BCAT2 antibody (16417-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-BCAT2 transfected MCF-7 cells.



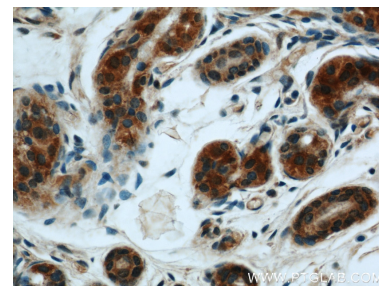
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using 16417-1-AP (BCAT2 antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.8 ug Anti-Human BCAT2 (16417-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.8 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human skin using 16417-1-AP (BCAT2 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skin using 16417-1-AP (BCAT2 antibody) at dilution of 1:50 (under 40x lens).