

For Research Use Only

# BCAT2 Polyclonal antibody

Catalog Number: 16417-1-AP

Featured Product

28 Publications



## Basic Information

**Catalog Number:**

16417-1-AP

**Concentration:**

267 µg/ml

**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

FC (Intra): 0.80 µg per 10<sup>6</sup> cells in a 100 µl suspension

## 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,

FC (Intra) : HepG2 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

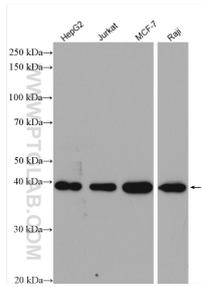
T: 4006900926

E: Proteintech-CN@ptglab.com

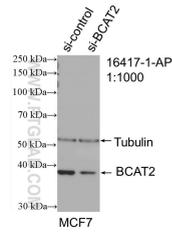
W: ptgcn.com

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

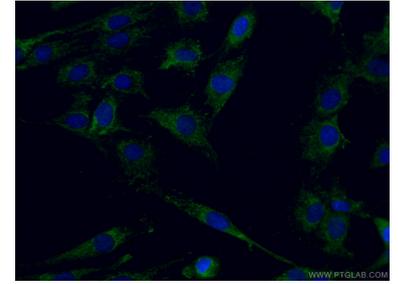
## Selected Validation Data



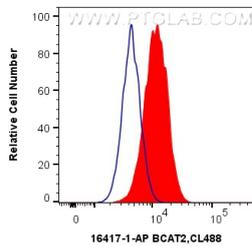
Various lysates were subjected to SDS PAGE followed by western blot with 16417-1-AP (BCAT2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



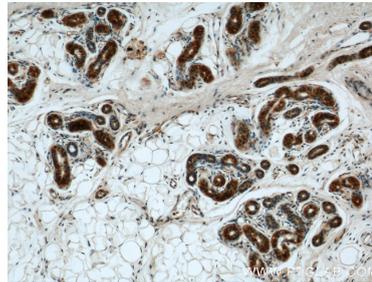
WB result of BCAT2 antibody (16417-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-BCAT2 transfected MCF-7 cells.



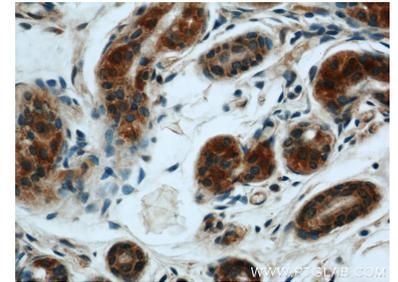
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using 16417-1-AP (BCAT2 antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).



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).