

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 10⁶ 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:

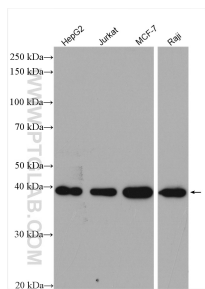
T: 4006900926

E: Proteintech-CN@ptglab.com

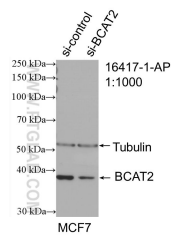
W: ptgcn.com

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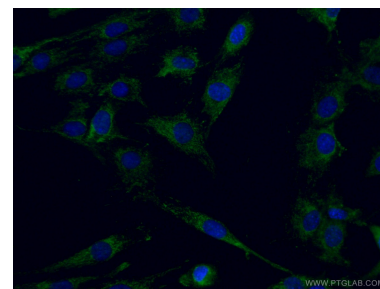
Selected Validation Data



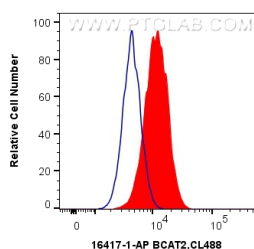
Various lysates were subjected to SDS PAGE followed by western blot with 16417-1-AP (BCAT2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



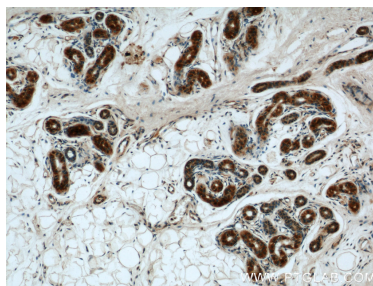
WB result of BCAT2 antibody (16417-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-BCAT2 transfected MCF-7 cells.



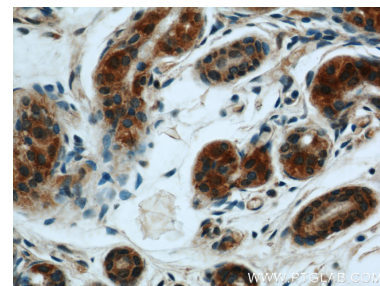
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using 16417-1-AP (BCAT2 antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).



1X10⁶ 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).