For Research Use Only

BCKDHA Polyclonal antibody

Catalog Number:30028-1-AP Featured Product 2 Publications

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Basic Information

Catalog Number:
30028-1-AP

Size:
800 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG32613

GenBank Accession Number:
BC008933

GeneID (NCBI):
593

UNIPROT ID:
P12694

Full Name:
branched chain keto acid dehydrogenase E1, alpha polypeptide

Calculated MW:
50 kDa

Observed MW:
42-50 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:16000
IHC 1:200-1:800

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB

Species Specificity:
Human, mouse, rat

Cited Species:
rat, mouse

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 : mouse liver tissue, HepG2 cells, rat liver tissue

IHC : human liver tissue,

Background Information

branched chain keto acid dehydrogenase E1, alpha polypeptide (BCKDHA), the gene encoding the regulated subunit of BCKDC was only one of two primary susceptibility genes identified that affected the risk of both type 2 diabetes mellitus (T2DM) and obesity (PMID: 25287287). BIX01294 transcriptionally downregulated the transcription of BCKDHA, which is essential for fueling the tricarboxylic acid (TCA) cycle. Studies have shown that KDM3A, a Jumonji histone demethylase, epigenetically regulates BCKDHA expression by binding to the BCKDHA gene promoter (PMID: 34876693). Moreover, at least four genes including BCKDHA, branched chain keto acid dehydrogenase E1, beta polypeptide (BCKDHB), dihydrolipoamide dehydrogenase (DLD), and dihydrolipoamide branched chain transacylase E2 (DBT) have been reported to be the causative gene for Maple syrup urine disease (MSUD) (PMID: 34187135).

Notable Publications

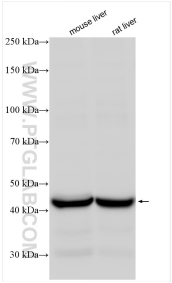
Author	Pubmed ID	Journal	Application
Haojie Jiang	37473846	J Thromb Haemost	WB
Ying Wang	37104913	Clin Nutr	WB

Storage

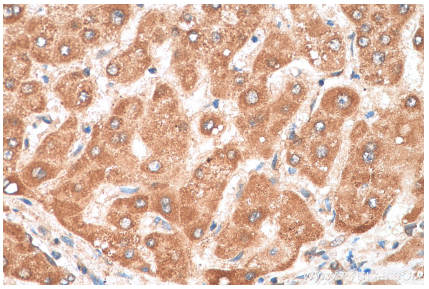
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

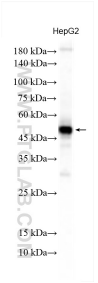
Selected Validation Data



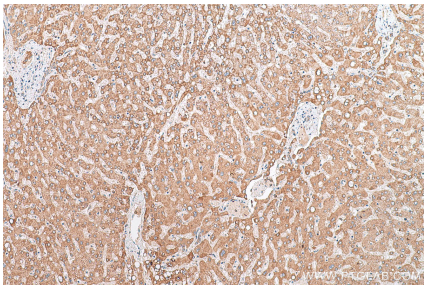
Various lysates were subjected to SDS PAGE followed by western blot with 30028-1-AP (BCKDHA antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 30028-1-AP (BCKDHA antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



HepG2 cells were subjected to SDS PAGE followed by western blot with 30028-1-AP (BCKDHA antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 30028-1-AP (BCKDHA antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).