

BCKDHA Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6830b**Specification**

BCKDHA Antibody (C-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	P12694
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50471
Antigen Region	362-390

BCKDHA Antibody (C-term) - Additional Information**Gene ID** 593**Other Names**

2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial, Branched-chain alpha-keto acid dehydrogenase E1 component alpha chain, BCKDE1A, BCKDH E1-alpha, BCKDHA

Target/Specificity

This BCKDHA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 362-390 amino acids from the C-terminal region of human BCKDHA.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BCKDHA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BCKDHA Antibody (C-term) - Protein Information**Name** BCKDHA ([HGNC:986](#))

Function Together with BCKDHB forms the heterotetrameric E1 subunit of the mitochondrial branched-chain alpha-ketoacid dehydrogenase (BCKD) complex. The BCKD complex catalyzes the multi-step oxidative decarboxylation of alpha-ketoacids derived from the branched-chain amino-acids valine, leucine and isoleucine producing CO₂ and acyl-CoA which is subsequently utilized to produce energy. The E1 subunit catalyzes the first step with the decarboxylation of the alpha-ketoacid forming an enzyme-product intermediate. A reductive acylation mediated by the lipoylamine cofactor of E2 extracts the acyl group from the E1 active site for the next step of the reaction.

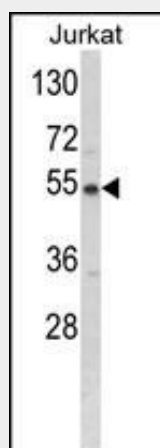
Cellular Location
Mitochondrion matrix

BCKDHA Antibody (C-term) - Protocols

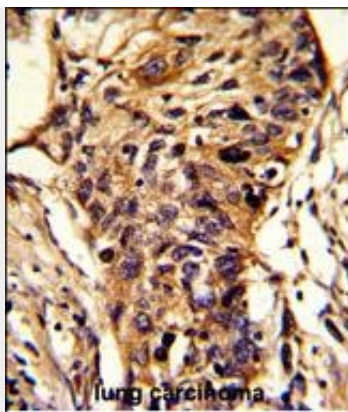
Provided below are standard protocols that you may find useful for product applications.

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

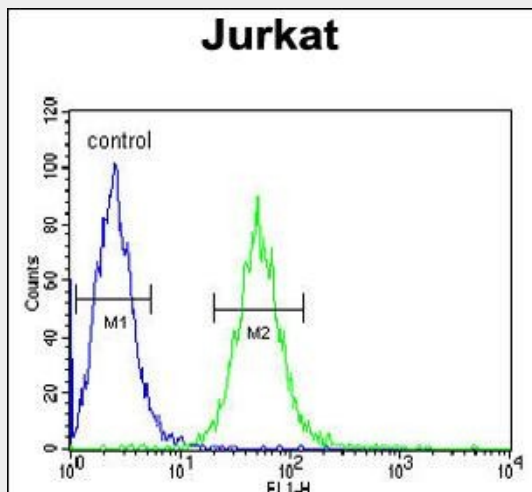
BCKDHA Antibody (C-term) - Images



Western blot analysis of BCKDHA Antibody (C-term) (Cat. #AP6830b) in Jurkat cell line lysates (35ug/lane). BCKDHA (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with BCKDHA Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



BCKDHA Antibody (C-term) (Cat. #AP6830b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

BCKDHA Antibody (C-term) - Background

The branched-chain alpha-keto acid (BCAA) dehydrogenase (BCKD) complex is an inner mitochondrial enzyme complex that catalyzes the second major step in the catabolism of the branched-chain amino acids leucine, isoleucine, and valine. The BCKD complex consists of three catalytic components: a heterotetrameric (alpha₂-beta₂) branched-chain alpha-keto acid decarboxylase (E1), a dihydrolipoyl transacylase (E2), and a dihydrolipoamide dehydrogenase (E3). BCKDHA is the alpha subunit of the decarboxylase (E1) component.

BCKDHA Antibody (C-term) - References

Flaschker, N., et al., J. Inherit. Metab. Dis. 30 (6), 903-909 (2007)