

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

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**BCKDHA Antibody (C-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P12694</a>
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 CO<sub>2</sub> 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**

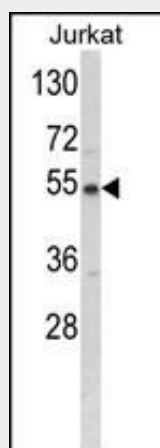
Mitochondrion matrix

### **BCKDHA Antibody (C-term) - Protocols**

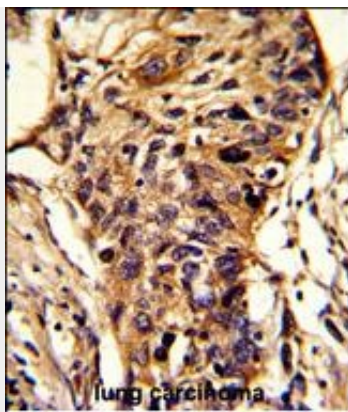
Provided below are standard protocols that you may find useful for product applications.

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

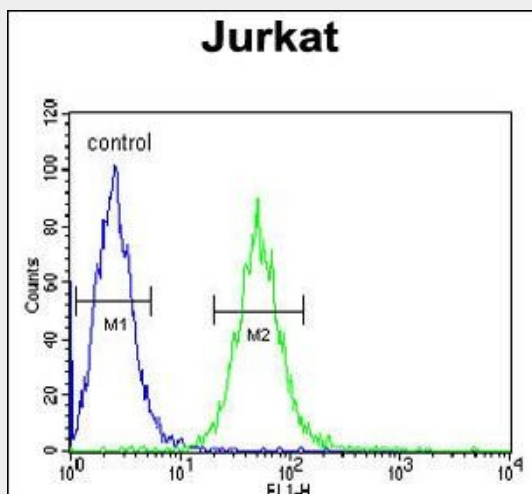
### **BCKDHA Antibody (C-term) - Images**



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 (alpha<sub>2</sub>-beta<sub>2</sub>) 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)