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# BCKDHA Antibody (C-term) Blocking Peptide

**Synthetic peptide**
**Catalog # BP6830b**

## Specification

### BCKDHA Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P12694

### BCKDHA Antibody (C-term) Blocking Peptide - 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**
The synthetic peptide sequence used to generate the antibody <a href=/products/AP6830b>AP6830b</a> was selected from the C-term region of human BCKDHA. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### BCKDHA Antibody (C-term) Blocking Peptide - 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 lipoylamide cofactor of E2 extracts the acyl group from the E1 active site for the next step of the reaction.

**Cellular Location**
Mitochondrion matrix

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## BCKDHA Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

## BCKDHA Antibody (C-term) Blocking Peptide - Images

## BCKDHA Antibody (C-term) Blocking Peptide - Background

The branched-chain alpha-keto acid (BCAA) dehydrogenase(BCKD) complex is an innter 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) Blocking Peptide - References

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