

Datasheet for ABIN359244

anti-BCKDK antibody (Middle Region)**2** Images[Go to Product page](#)

Overview

Quantity:	0.4 mL
Target:	BCKDK
Binding Specificity:	Middle Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BCKDK antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the central region of human BCKDK.
Isotype:	Ig Fraction
Specificity:	This antibody reacts to BCKDK.
Purification:	Prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS

Target Details

Target:	BCKDK
Alternative Name:	BCKDK (BCKDK Products)

Target Details

Background: The second major step in the catabolism of the branched-chain amino acids, isoleucine, leucine, and valine, is irreversibly catalyzed by the branched-chain alpha-keto acid dehydrogenase complex (BCKD), an inner-mitochondrial enzyme complex composed of 3 catalytic components: a branched-chain alpha-keto acid decarboxylase (E1), a dihydrolipoyl transacylase (E2), and a dihydrolipoamide dehydrogenase (E3). The complex also contains 2 enzymes that regulated the state of activity of the BCKD complex: a kinase (BCKDK), and a phosphorylase. The ubiquitously expressed kinase contains 1 histidine kinase domain. Maple syrup urine disease (MSUD) is a pathology secondary to an enzyme defect in the catabolic pathway of leucine, isoleucine, and valine. Accumulation of these amino acids and their corresponding keto acids results in encephalopathy and progressive neurodegeneration in infants not treated for MSUD. Synonyms: BCKD-kinase, BCKDHKIN, Branched-chain alpha-ketoacid dehydrogenase kinase, [3-methyl-2-oxobutanoate dehydrogenase [lipoamide]] kinase mitochondrial

Gene ID: 10295, 9606

UniProt: [O14874](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

Application Details

Application Notes: ELISA: 1/1,000. Western blotting: 1/100 - 1/500. Immunohistochemistry: 1/50 - 1/100.
Other applications not tested.
Optimal dilutions are dependent on conditions and should be determined by the user.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.25 mg/mL

Buffer: PBS with 0.09 % (W/V) sodium azide

Preservative: Sodium azide

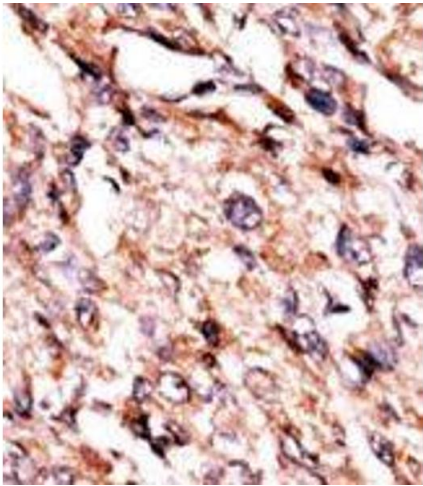
Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Handling

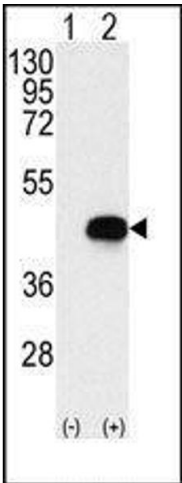
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at-20 °C for longer.

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.



Western Blotting

Image 2. Western blot analysis of BCKDK (arrow) using rabbit polyclonal BCKDK Antibody