

## Datasheet for ABIN5652334 **BCKDK ELISA Kit**



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### Overview

Quantity: 96 tests

Target: BCKDK

Reactivity: Rat

Method Type: Sandwich ELISA

Detection Range: 3.12 ng/mL - 200 ng/mL

Minimum Detection Limit: 3.12 ng/mL

Application: ELISA

### Product Details

Sample Type: Cell Lysate, Tissue Homogenate

Analytical Method: Quantitative

Detection Method: Colorimetric

Specificity: This assay has high sensitivity and excellent specificity for detection of Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK). No significant cross-reactivity or interference between Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK) and analogues was observed.

Sensitivity: 1.29 ng/mL

### Target Details

Target: BCKDK

Alternative Name: Branched Chain Alpha-Ketoacid Dehydrogenase Kinase ([BCKDK Products](#))

## Target Details

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Background: Gene Name: Branched Chain Alpha-Ketoacid Dehydrogenase Kinase  
Gene Aliases: BCKDHKIN, 3-Methyl-2-Oxobutanoate Dehydrogenase/Lipoamide Kinase,Mitochondrial

Gene ID: 29603

UniProt: [Q00972](#)

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

## Application Details

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Comment: The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5 % within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

Assay Time: 3 h

Plate: Pre-coated

Protocol: The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm  $\pm$  10nm. The concentration of Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK) in the samples is then determined by comparing the O.D. of the samples to the standard curve.

Assay Precision: Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK) were tested 20 times on one plate, respectively  
Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Branched Chain Alpha-Ketoacid Dehydrogenase Kinase (BCKDK) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100

## Application Details

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Intra-Assay: CV<10%

Inter-Assay: CV<12%

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Restrictions: For Research Use only

## Handling

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Handling Advice: The Stop Solution is acidic. Do not allow to contact skin or eyes. Calibrators, controls and specimen samples should be assayed in duplicate. Once the procedure has been started, all steps should be completed without interruption.

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Storage: 4 °C,-20 °C

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Storage Comment: -20°C. Bring all reagents to room temperature before beginning test. The kit may be stored at 4°C for immediate use within two days upon arrival. Reseal any unused strips with desiccant pack. Minimize freeze/thaw cycles.

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Expiry Date: 4-8 months