

Datasheet for ABIN4912899

anti-PDK4 antibody[Go to Product page](#)**1** Image

Overview

Quantity:	100 µL
Target:	PDK4
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB)

Product Details

Immunogen:	Purified His-tagged PDK4 protein(Fragment) was used to produced this monoclonal antibody.
Clone:	5C2
Isotype:	IgG1
Cross-Reactivity:	Human
Purification:	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.

Target Details

Target:	PDK4
Alternative Name:	PDK4 (PDK4 Products)
Background:	Synonyms: [Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 4, mitochondrial, Pyruvate dehydrogenase kinase isoform 4, PDK4, PDHK4

Target Details

Background: Kinase that plays a key role in regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2. This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic acid cycle, down-regulates aerobic respiration and inhibits the formation of acetyl-coenzyme A from pyruvate. Inhibition of pyruvate dehydrogenase decreases glucose utilization and increases fat metabolism in response to prolonged fasting and starvation. Plays an important role in maintaining normal blood glucose levels under starvation, and is involved in the insulin signaling cascade. Via its regulation of pyruvate dehydrogenase activity, plays an important role in maintaining normal blood pH and in preventing the accumulation of ketone bodies under starvation. In the fed state, mediates cellular responses to glucose levels and to a high-fat diet. Regulates both fatty acid oxidation and de novo fatty acid biosynthesis. Plays a role in the generation of reactive oxygen species. Protects detached epithelial cells against anoikis. Plays a role in cell proliferation via its role in regulating carbohydrate and fatty acid metabolism.

Gene ID: 5166

UniProt: [Q16654](#)

Pathways: [PI3K-Akt Signaling](#), [Hedgehog Signaling](#), [Carbohydrate Homeostasis](#), [Regulation of Carbohydrate Metabolic Process](#), [Warburg Effect](#)

Application Details

Application Notes: WB 1:300-5000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.5 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

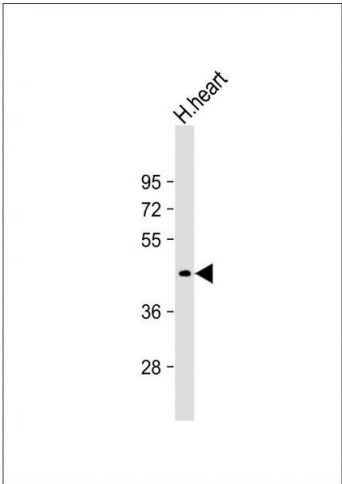
Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Handling

Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Human heart lysate (20µg), probed with bsm-51108M PDK4 (345CT19.6.2) Monoclonal Antibody at 1:1000 dilution and 4°C *overnight incubation, followed by secondary antibody incubation for 60min at room temperature.*