DATASHEET

PCK2 Mouse Monoclonal Antibody(C2894)

CAT. NO. AMA02506

KEY FEATURES

Target	PCK2	Source / Host	Mouse
Reactivity	Human, Rat, Monkey	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Mitochondrial phosphoenolpyruvate carboxykinase that catalyzes the conversion of oxaloacetate (OAA) to phosphoenolpyruvate (PEP), the rate-limiting step in the metabolic pathway that produces glucose from lactate and other precursors derived from the citric acid cycle to phosphoenolpyruvate (PEP), the rate-limiting step in the metabolic pathway that produces glucose from lactate and other precursors derived from the citric acid cycle . Can play an active role in glyceroneogenesis and gluconeogenesis . Also acts as a serine/threonine-protein kinase: phosphorylates and activates ACSL4, thereby promoting ferroptosis .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Mouse monoclonal to PCK2
Specificity	Recognizes endogenous levels of PCK2 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human PCK2 expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 71 kD; Observed: 70 kD kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	PEPCK2; Phosphoenolpyruvate carboxykinase [GTP], mitochondrial; PEPCK-M
Gene Symbol	PCK2
Entrez Gene	5106(Human)
SwissProt	Q16822(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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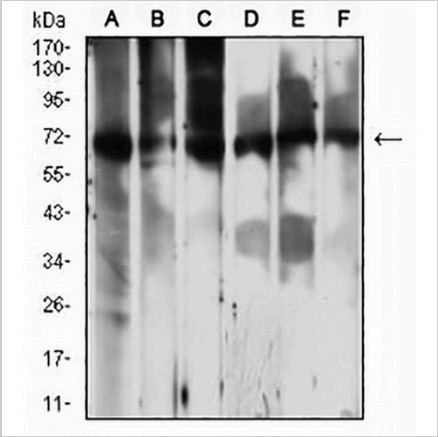
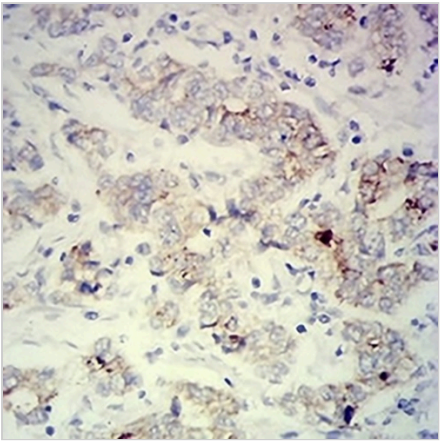
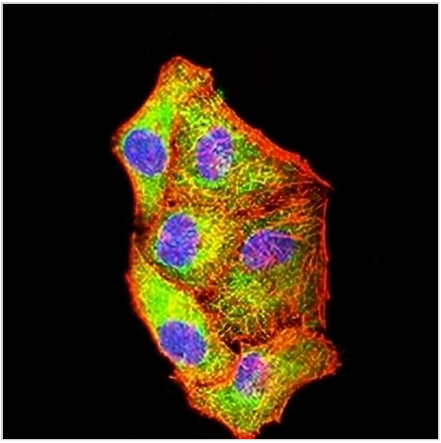
DATA



Western blot analysis of PCK2 expression in Jurkat (A), C2C12 (B), Hela (C), HepG2 (D), COS7 (E), HL60 (F) whole cell lysates. (Predicted band size: 71 kD; Observed band size: 70 kD kD)



Immunohistochemical analysis of PCK2 staining in human stomach cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PCK2 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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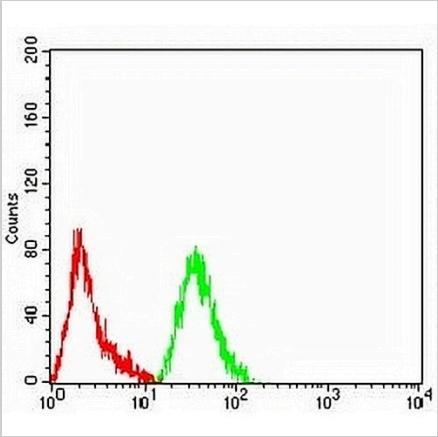
DATA (CONTINUED)



Flow cytometric analysis of HeLa cells using Anti-PCK2 Antibody (green) and negative control (red).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.