

PCK2 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8094a

Specification

PCK2 Antibody (N-term) - Product Information

Application	IF, WB, IHC-P,E
Primary Accession	Q16822
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	70699
Antigen Region	24-54

PCK2 Antibody (N-term) - Additional Information

Gene ID 5106

Other Names

Phosphoenolpyruvate carboxykinase [GTP], mitochondrial, PEPCK-M, PCK2, PEPCK2

Target/Specificity

This PCK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 24-54 amino acids from the N-terminal region of human PCK2.

Dilution

IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PCK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PCK2 Antibody (N-term) - Protein Information

Name PCK2 ([HGNC:8725](#))

Synonyms PEPCK2

Function 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 (PubMed:[28955899](#)). Can play an active role in glyceroneogenesis and gluconeogenesis (PubMed:[28955899](#)). Also acts as a serine/threonine- protein kinase: phosphorylates and activates ACSL4, thereby promoting ferroptosis (PubMed:[38720107](#)).

Cellular Location

Mitochondrion

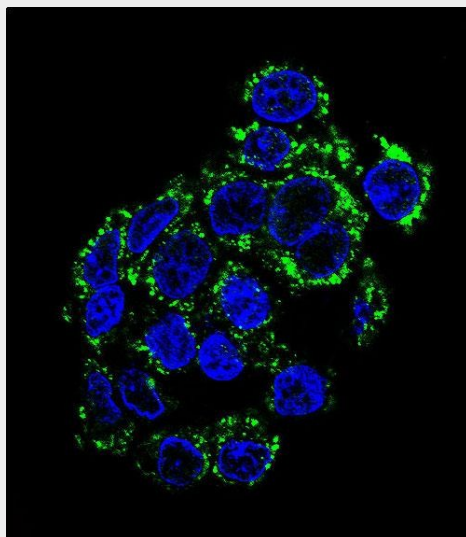
Tissue Location

Widely expressed..

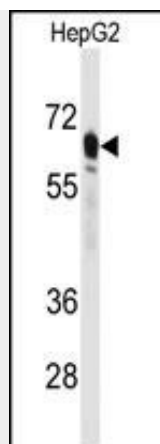
PCK2 Antibody (N-term) - Protocols

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

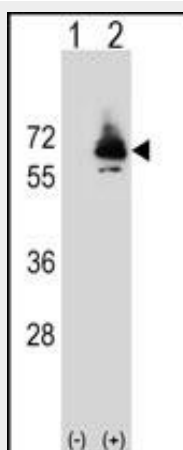
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PCK2 Antibody (N-term) - Images

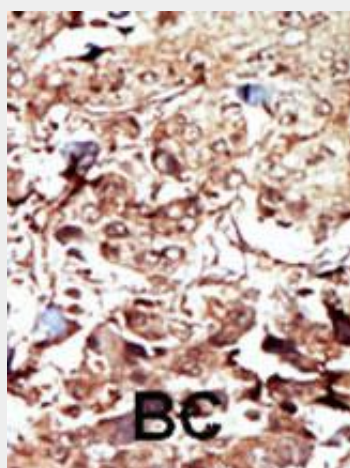
Confocal immunofluorescent analysis of PCK2 Antibody (N-term)(Cat#AP8094a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



Western blot analysis of anti-PCK2 Antibody (N-term) (Cat.#AP8094a) in HepG2 cell line lysates (35ug/lane). PCK2 (arrow) was detected using the purified Pab.



Western blot analysis of PCK2 (arrow) using rabbit polyclonal PCK2 Antibody (Q39) (Cat.#AP8094a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PCK2 gene.



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. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

PCK2 Antibody (N-term) - Background

This gene encodes a member of the phosphoenolpyruvate carboxykinase (GTP) family. The protein is a mitochondrial enzyme that catalyzes the conversion of oxaloacetate to phosphoenolpyruvate in the presence of GTP. A cytosolic form encoded by a different gene has also been characterized and is the key enzyme of gluconeogenesis in the liver. The encoded protein may serve a similar function, although it is constitutively expressed and not modulated by hormones such as glucagon and insulin that regulate the cytosolic form. Alternatively spliced transcript variants have been described.

PCK2 Antibody (N-term) - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).
Modaressi, S., et al., Biochem. J. 333 (Pt 2), 359-366 (1998).
Modaressi, S., et al., Biochem. J. 315 (Pt 3), 807-814 (1996).