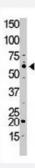


# PCK2 polyclonal antibody

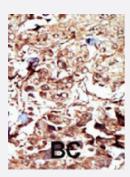
Catalog # PAB3311 Size 400 uL

# **Applications**



## Western Blot (Cell lysate)

Western blot analysis of PCK2 polyclonal antibody (Cat # PAB3311) in A-375 cell lysate. PCK2 (arrow) was detected using purified polyclonal antibody. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



# Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with PCK2 polyclonal antibody (Cat # PAB3311), 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.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PCK2.
lmmunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human PCK2.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification



## **Product Information**

Recommend Usage	Immunofluorescence (1:10-50) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:50-100) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

# **Applications**

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Immunofluorescence

Gene Info — PCK2	
Entrez GeneID	<u>5106</u>
Protein Accession#	Q16822 (Precursor)
Gene Name	PCK2
Gene Alias	PEPCK, PEPCK-M, PEPCK2
Gene Description	phosphoenolpyruvate carboxykinase 2 (mitochondrial)
Omim ID	<u>261650</u>
Gene Ontology	<u>Hyperlink</u>



#### **Product Information**

#### **Gene Summary**

This gene encodes a member of the phosphoenolpyruvate carboxykinase (GTP) family. The prote in is a mitochondrial enzyme that catalyzes the conversion of oxaloacetate to phosphoenolpyruvat e in the presence of GTP. A cytosolic form encoded by a different gene has also been characteriz ed 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. [provided by RefSeq

#### **Other Designations**

OTTHUMP00000164700|PEP carboxykinase|mitochondrial phosphoenolpyruvate carboxykinase 2|phosphoenolpyruvate carboxylase|phosphopyruvate carboxylase

### **Publication Reference**

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.

Strausberg RL, Feingold EA, Grouse LH, Derge JG, Klausner RD, Collins FS, Wagner L, Shenmen CM, Schuler GD, Altschul SF, Zeeberg B, Buetow KH, Schaefer CF, Bhat NK, Hopkins RF, Jordan H, Moore T, Max SI, Wang J, Hsieh F, Diatchenko L, Marusina K, Farmer AA, Rubin GM, Hong L, Stapleton M, Soares MB, Bonaldo MF, Casavant TL, Scheetz TE, Brownstein MJ, Usdin TB, Toshiyuki S, Carninci P, Prange C, Raha SS, Loquellano NA, Peters GJ, Abramson RD, Mullahy SJ, Bosak SA, McEwan PJ, McKernan KJ, Malek JA,

PNAS 2002 Dec; 99(26):16899.

 Cloning, expression analysis, and functional characterization of PKL12, a member of a new subfamily of ser/thr kinases.

Ligos JM, Gerwin N, Fernandez P, Gutierrez-Ramos JC, Bernad A.

Biochemical and Biophysical Research Communications 1998 Aug; 249(2):380.

 Human mitochondrial phosphoenolpyruvate carboxykinase 2 gene. Structure, chromosomal localization and tissue-specific expression.

Modaressi S, Brechtel K, Christ B, Jungermann K.

The Biochemical Journal 1998 Jul; 333 (Pt 2):359.

## Pathway

- Adipocytokine signaling pathway
- Citrate cycle (TCA cycle)
- Glycolysis / Gluconeogenesis
- Insulin signaling pathway
- Metabolic pathways



- PPAR signaling pathway
- Pyruvate metabolism

# Disease

Diabetes Mellitus