10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PCK2 Rabbit mAb

Catalog # AP75876

Product Information

Application	WB, IHC-P, FC
Primary Accession	Q16822
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	70699

Additional Information

Gene ID	5106
Other Names	PCK2
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

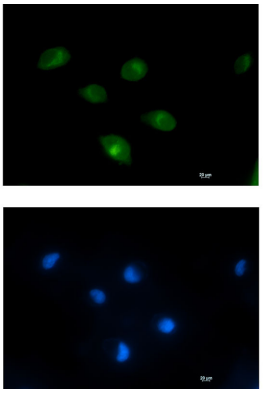
Name	PCK2 (HGNC:8725)
Synonyms	PEPCK2
Function	Mitochondrial phosphoenolpyruvate carboxykinase that catalyzes the conversion of oxaloacetate (OAA) to phosphoenolpyruvate (PEP), the rate-limiting step in the metabolic pathway that produces glucose from lactate and other precursors derived from the citric acid cycle (PubMed:28955899). Can play an active role in glyceroneogenesis and gluconeogenesis (PubMed:28955899). In lipogenic cells such as adipocytes, it generates PEP via the mitochondrial pyruvate-to-PEP bypass, driving the PEP flux required for cytosolic glycerol 3- phosphate and triglyceride synthesis (By similarity). Also acts as a serine/threonine-protein kinase: phosphorylates and activates ACSL4, thereby promoting ferroptosis (PubMed:38720107).
Cellular Location	Mitochondrion

Tissue Location	Widely expressed..

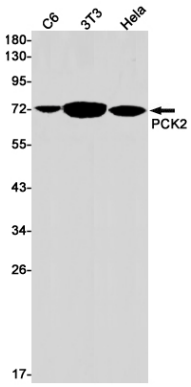
Background

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.

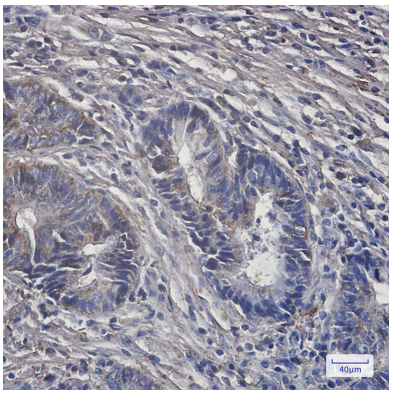
Images



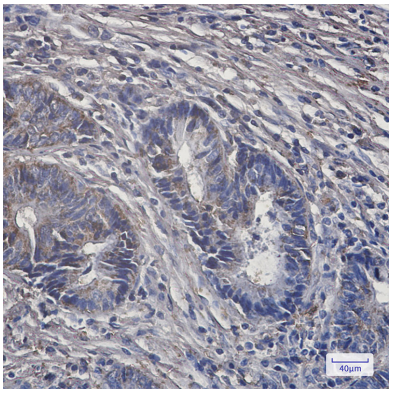
Immunocytochemistry analysis of PCK2 (green) in HT-1080 using PCK2 antibody,and DAPI(blue).



Western blot analysis of PCK2 in C6, 3T3, Hela lysates using PCK2 antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer tissue using PCK2 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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