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

PCK2 Antibody

Rabbit mAb
Catalog # AP91578

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	Q16822
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	PCK2; PE; PEP carboxykinase; PEPCK; PEPCK M; PEPCK2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	70699

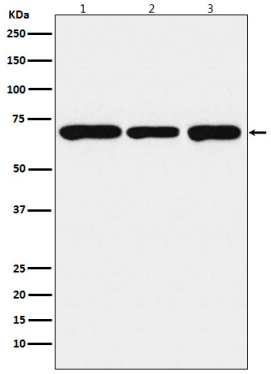
Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PCK2
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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..

Images



Western blot analysis of PCK2 expression in (1) HepG2 cell lysate; (2) Mouse brain lysate; (3) Rat spleen lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.