10320 Camino Santa Fe, Suite G
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Goat Anti-PCK2 / PEPCK-M Antibody

Peptide-affinity purified goat antibody
Catalog # AF1797a

Specification

Goat Anti-PCK2 / PEPCK-M Antibody - Product Information

Application	**WB, IF, FC**
Primary Accession	Q16822
Other Accession	NP_004554, 5106
Reactivity	**Human, Mouse, Rat, Guinea Pig**
Predicted	**Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**70699**

Goat Anti-PCK2 / PEPCK-M Antibody - Additional Information

Gene ID 5106

Other Names
Phosphoenolpyruvate carboxykinase [GTP], mitochondrial, PEPCK-M, 4.1.1.32, PCK2, PEPCK2

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-PCK2 / PEPCK-M Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PCK2 / PEPCK-M Antibody - 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).

Cellular Location
Mitochondrion.

Tissue Location
Widely expressed..

Goat Anti-PCK2 / PEPCK-M Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-PCK2 / PEPCK-M Antibody - Images

AF1797a (2 µg/ml) staining of Human Liver lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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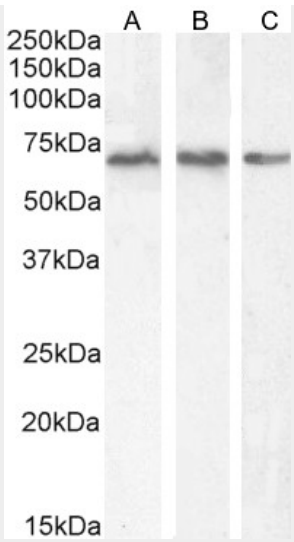
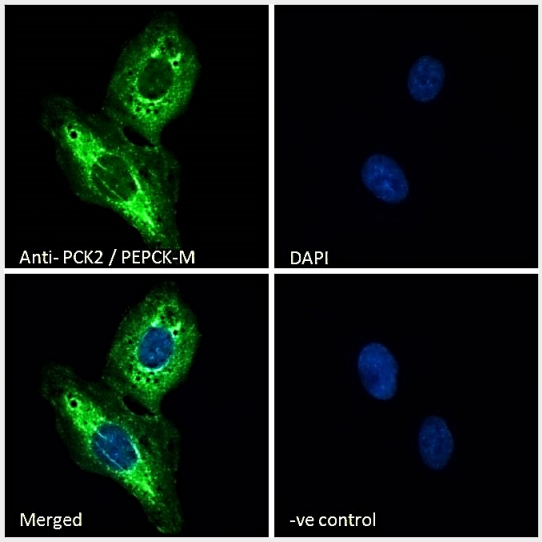


EB06944 (2µg/ml) staining of A431 (A), HEK293 (B) and (1ug/ml) HepG2 (C) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

.EB06944 (2µg/ml) staining of NIH3T3 cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



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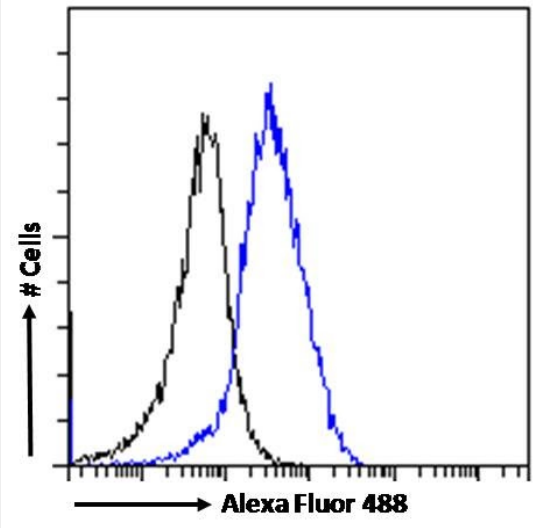
EB06944 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (b



EB06944 Flow cytometric analysis of paraformaldehyde fixed MCF7 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

Goat Anti-PCK2 / PEPCK-M Antibody - 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.

Goat Anti-PCK2 / PEPCK-M Antibody - References

COMMON VARIANTS IN 40 GENES ASSESSED FOR DIABETES INCIDENCE AND RESPONSE TO METFORMIN AND LIFESTYLE INTERVENTIONS IN THE DIABETES PREVENTION PROGRAM. Jablonski KA, et al. Diabetes, 2010 Aug 3. PMID 20682687.
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Endurance capacity, not body size, determines physical activity levels: role of skeletal muscle PEPCK. Novak CM, et al. PLoS One, 2009 Jun 12. PMID 19521512.
Multiple genetic variants along candidate pathways influence plasma high-density lipoprotein cholesterol concentrations. Lu Y, et al. J Lipid Res, 2008 Dec. PMID 18660489.
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