

## UK Office

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**Research Use Only. Not for  
diagnostic or therapeutic use.**

## EB06944 - Goat Anti-PCK2 / PEPCK-M Antibody

Size: 100µg specific antibody in 200µl



### Target Protein

**Principal Names:** PCK2, PEPCK-M, phosphoenolpyruvate carboxykinase 2 (mitochondrial), HGNC:8725, PEPCK, PEPCK2, PEP carboxykinase, mitochondrial phosphoenolpyruvate carboxykinase 2, phosphoenolpyruvate carboxylase, phosphopyruvate carboxylase

**Official Symbol:** PCK2

**Accession Number(s):** NP\_004554.3; NP\_001278485.1

**Human GeneID(s):** [5106](#)

**Important Comments:** No cross-reactivity with PCK1.

### Immunogen

Peptide with sequence KPWKPGDKEPCAH, from the internal region of the protein sequence according to NP\_004554.3; NP\_001278485.1.

Please note the [peptide](#) is available for sale.

### Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

### Applications Tested

**Peptide ELISA:** antibody detection limit dilution 1:4000.

**Western blot:** Approx 70kDa band observed in lysates of cell lines A431, HEK293 HepG2 and NIH3T3 (calculated MW of 70.7kDa according to Human NP\_004554.3 and 70.5kDa according to Mouse NP\_083270.2). Recommended concentration: 1-3µg/ml. Primary incubation 1 hour at room temperature.

**Immunofluorescence:** Strong expression of the protein seen in the cytoplasm of U2OS cells. Recommended concentration: 10µg/ml.

**Flow Cytometry:** Flow cytometric analysis of MCF7 cells. Recommended concentration: 10ug/ml.

### Species Reactivity

**Tested:** Human, Mouse

**Expected from sequence similarity:** Human, Mouse, Rat, Dog, Pig, Cow

### Specific References

**This antibody (previous batch) has been successfully used in WB and IF on Human:**

Méndez-Lucas A, Hyrossová P, Novellasdemunt L, Viñals F, Perales JC.

Mitochondrial phosphoenolpyruvate carboxykinase (PEPCK-M) is

a pro-survival, endoplasmicreticulum (ER) stress response gene involved in tumor cell adaptation to  
J Biol Chem. 2014 Aug 8;289(32):22090-102

PMID: 24973213

**This antibody (previous batch) has been successfully used in WB and IF on Mouse:**

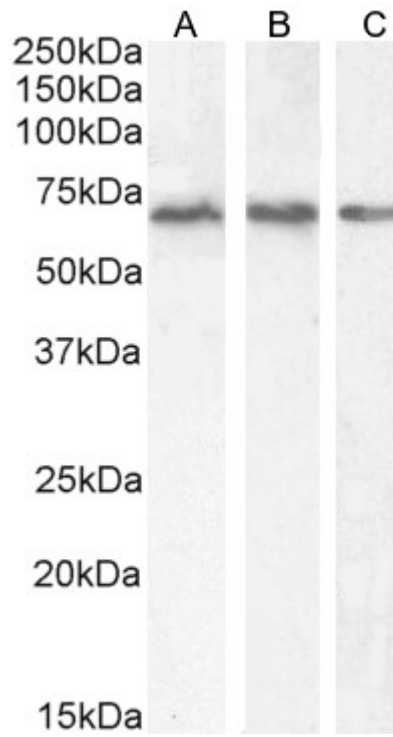
Méndez-Lucas A, Duarte JA, Sunny NE, Satapati S, He T, Fu X, Bermúdez J, Burgess SC, Perales JC.

PEPCK-M expression in mouse liver potentiates, not replaces, PEPCK-C mediated

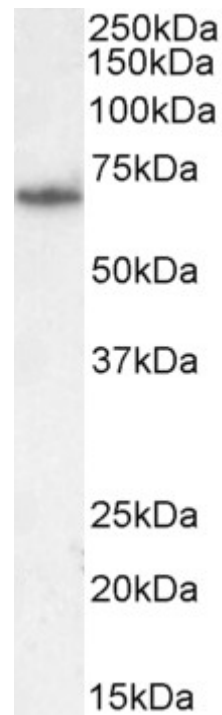
gluconeogenesis.

J Hepatol. 2013 Mar 4. doi:pii: S0168-8278(13)00142-6.

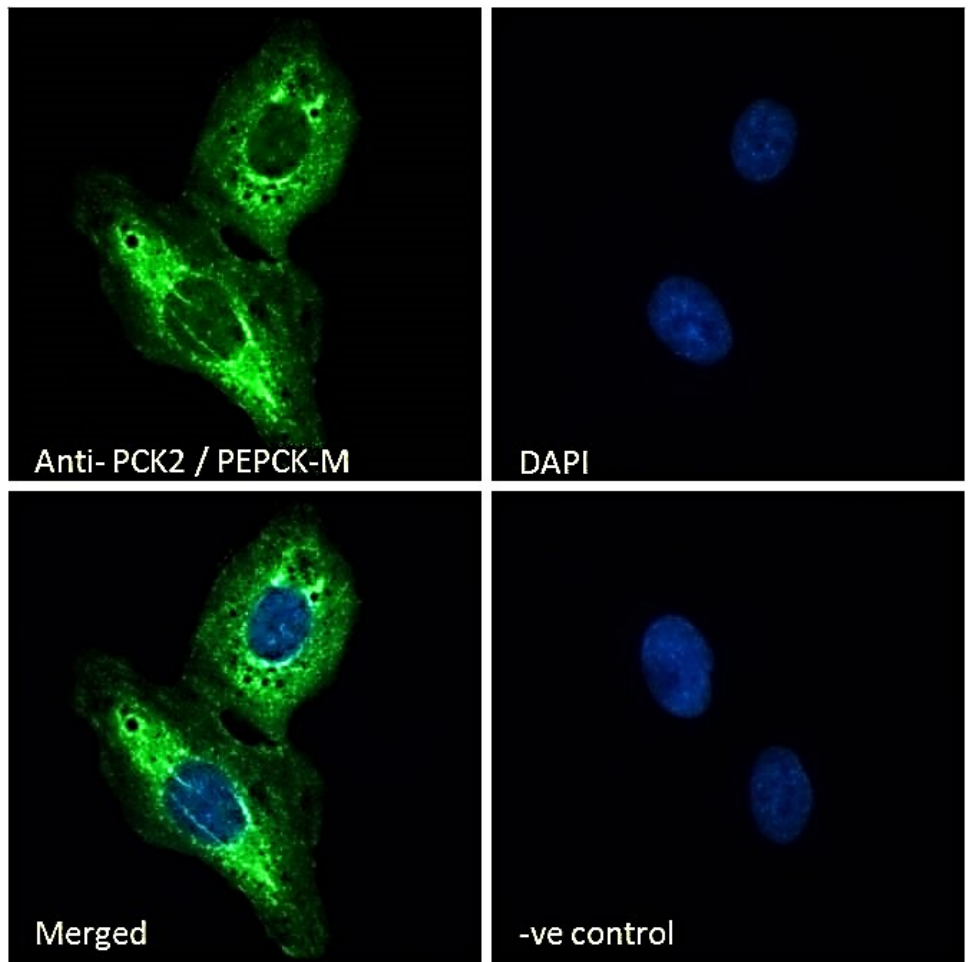
PMID: 23466304



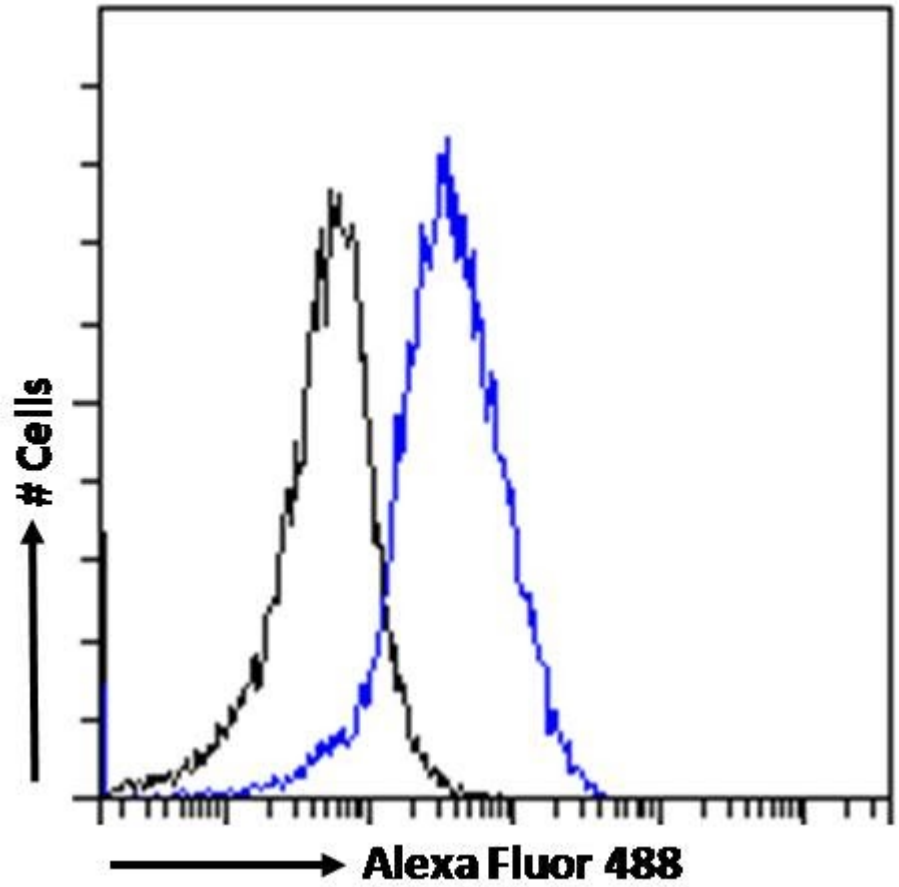
EB06944 (2 $\mu$ g/ml) staining of A431 (A), HEK293 (B) and (1 $\mu$ g/ml) HepG2 (C) cell lysate (35 $\mu$ g protein in RIPA buffer). Detected by chemiluminescence.



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



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 (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



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) followed by Alexa Fluor 488 secondary antibody.