

International Office

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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): <u>5106</u> 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

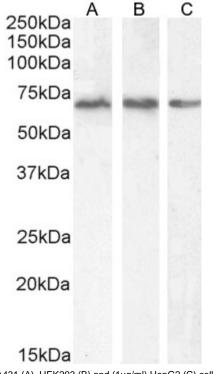
a pro-survival, endoplasmicreticulum (ER) stress response gene involved in tumor cell adaptation to J Biol Chem. 2014 Aug 8;289(32):22090-102

PMID: 24973213

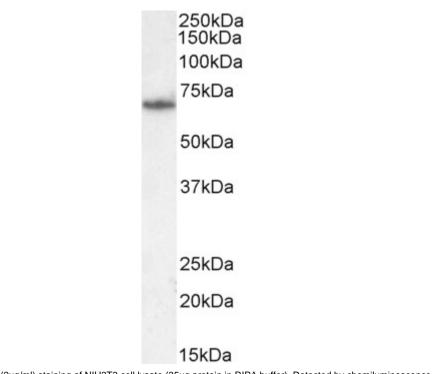
This antibody (previous batch) has been successfully used in WB and IF on Mouse: Méndez-Lucas A, Duarte JA, Sunny NE, Satapati S, He T, Fu X, Bermúdez J, Burgess SC, Perales JC.

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

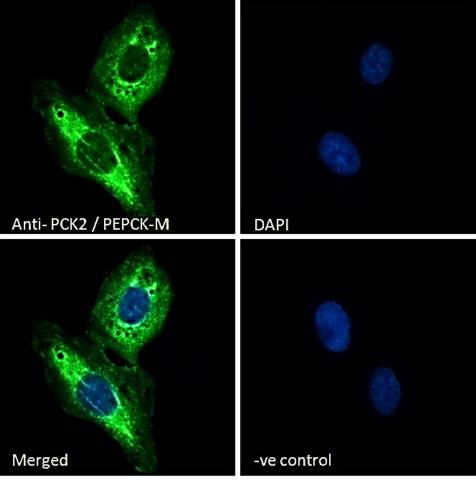
gluconeogenesis. J Hepatol. 2013 Mar 4. doi:pii: S0168-8278(13)00142-6. PMID: 23466304



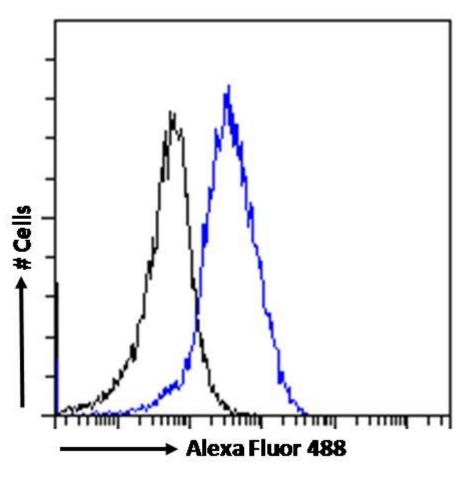
EB06944 (2µg/ml) staining of A431 (A), HEK293 (B) and (1ug/ml) HepG2 (C) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



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



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.