abcam

Product datasheet

Anti-PCK2 antibody ab70359

★★★★★ 1 Abreviews 17 References 画像数 4

製品の概要

製品名	Anti-PCK2 antibody
製品の詳細	Rabbit polyclonal to PCK2
由来種	Rabbit
アプリケーション	**適用あり:** ICC/IF, IHC-P, WB, IP
種交差性	**交差種:** Human **交差が予測される動物種:** Mouse, Rat, Pig
免疫原	Synthetic peptide corresponding to Human PCK2 aa 400-500 conjugated to keyhole limpet haemocyanin. (Peptide available as **ab87120**)
ポジティブ・コントロール	This antibody gave a positive signal in HepG2 Whole Cell Lysate.
特記事項	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
精製度	Immunogen affinity purified

ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab70359の使用に適用されます

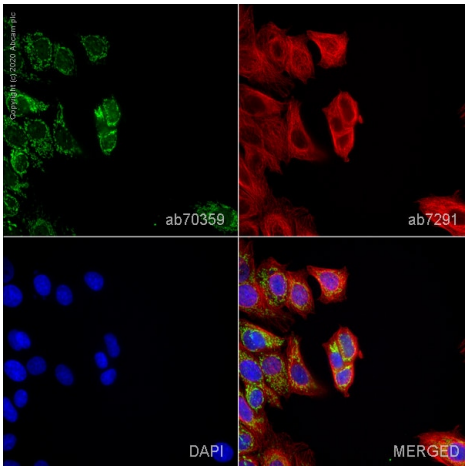
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 1 µg/ml.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 71 kDa (predicted molecular weight: 71 kDa).
IP		Use at an assay dependent concentration.

ターゲット情報

機能	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.
パスウェイ	Carbohydrate biosynthesis; gluconeogenesis.
関連疾患	Defects in PCK2 are the cause of mitochondrial phosphoenolpyruvate carboxykinase deficiency (M-PEPCKD) [MIM:261650]. A metabolic disorder resulting from impaired gluconeogenesis. It is a rare disease with less than 10 cases reported in the literature. Clinical characteristics include hypotonia, hepatomegaly, failure to thrive, lactic acidosis and hypoglycemia. Autoposy reveals fatty infiltration of both the liver and kidneys. The disorder is transmitted as an autosomal recessive trait.
配列類似性	Belongs to the phosphoenolpyruvate carboxykinase [GTP] family.
翻訳後修飾	Phosphorylated upon DNA damage, probably by ATM or ATR.
細胞内局在	Mitochondrion.

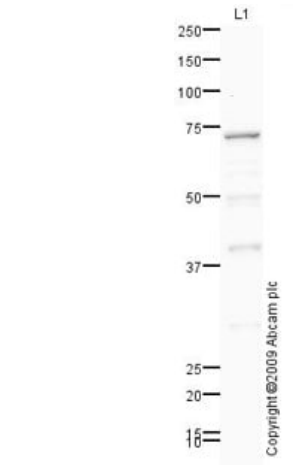
画像



Immunocytochemistry/ Immunofluorescence - Anti-PCK2 antibody (ab70359)

ab70359 staining Phosphoenolpyruvate carboxykinase [GTP], mitochondrial precursor in MCF7 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab70359 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-PCK2 antibody (ab70359)

Anti-PCK2 antibody (ab70359) at 1 µg/ml + HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate at 10 µg

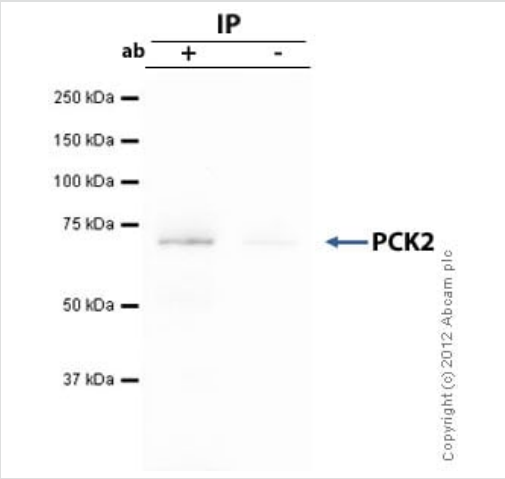
Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

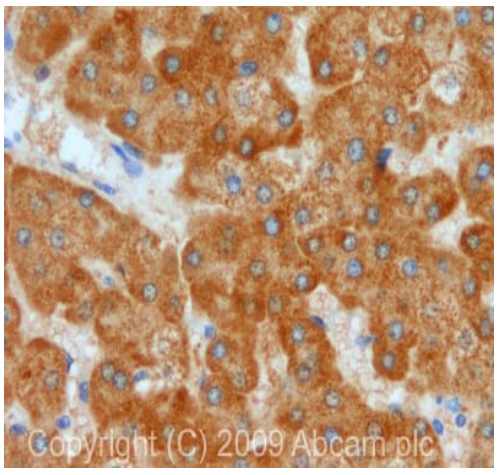
Performed under reducing conditions.

Predicted band size: 71 kDa
Observed band size: 71 kDa
Additional bands at: 40 kDa, 50 kDa. We are unsure as to the identity of these extra bands.



Immunoprecipitation - Anti-PCK2 antibody (ab70359)

PCK2 was immunoprecipitated using 0.5mg HepG2 whole cell extract, 5µg of Rabbit polyclonal to PCK2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).
The antibody was incubated under agitation with Protein G beads for 10min, HepG2 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70^{o}C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab70359.
Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (**ab99697**).
Band: 71kDa: PCK2.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCK2 antibody (ab70359)

IHC image of PCK2 staining in normal human liver formalin fixed paraffin embedded tissue section, performed on a Leica Bond^{TM} system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab70659**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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