

Product datasheet

Anti-PCK1/PEPC antibody [EPR6938] ab133603

Recombinant RabMAb

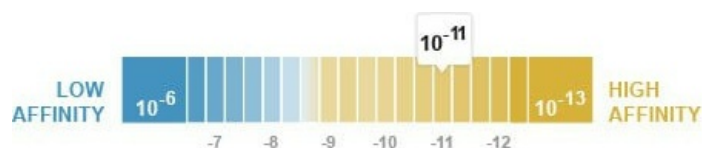
[2 References](#) [4 Images](#)

Overview

Product name	Anti-PCK1/PEPC antibody [EPR6938]
Description	Rabbit monoclonal [EPR6938] to PCK1/PEPC
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human PCK1/PEPC aa 1-100. The exact sequence is proprietary.
Positive control	Human fetal kidney lysate; Human adipose tissue lysate; Human liver tissue
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 3.50 x 10 ⁻¹¹ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6938
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133603 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

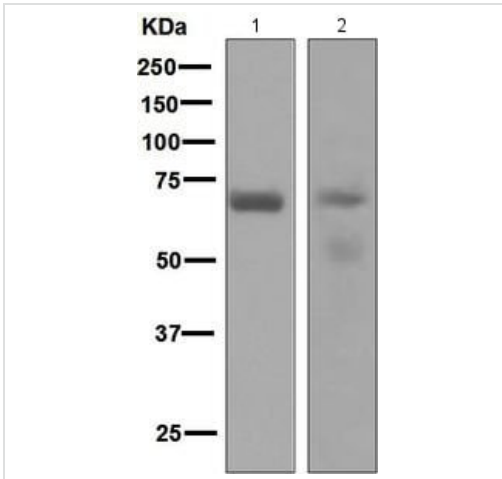
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 69 kDa (predicted molecular weight: 69 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function	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.
Tissue specificity	Major sites of expression are liver, kidney and adipocytes.
Pathway	Carbohydrate biosynthesis; gluconeogenesis.
Involvement in disease	Defects in PCK1 are the cause of cytosolic phosphoenolpyruvate carboxykinase deficiency (cytosolic PEPCK deficiency) [MIM:261680]. PEPCK deficiency is 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. Autopsy reveals fatty infiltration of both the liver and kidneys. The disorder is transmitted as an autosomal recessive trait.
Sequence similarities	Belongs to the phosphoenolpyruvate carboxykinase [GTP] family.
Post-translational modifications	Acetylation is increased on addition of glucose and appears to regulate the protein stability.
Cellular localization	Cytoplasm.

Images



Western blot - Anti-PCK1/PEPC antibody
[EPR6938] (ab133603)

All lanes : Anti-PCK1/PEPC antibody [EPR6938] (ab133603) at 1/10000 dilution

Lane 1 : Human fetal kidney tissue lysate

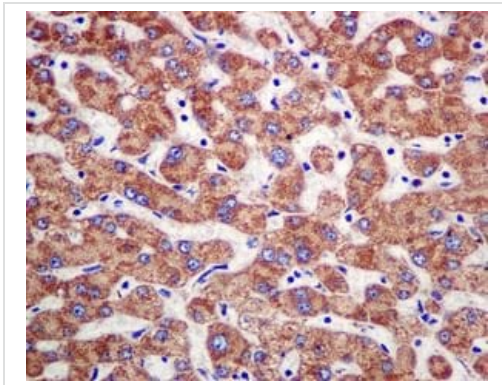
Lane 2 : Human adipose tissue lysate

Secondary

All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 69 kDa

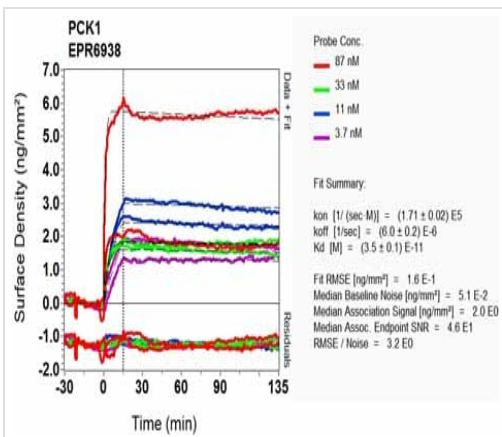
Observed band size: 69 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PCK1/PEPC antibody
[EPR6938] (ab133603)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labelling PCK1/PEPC with ab133603 at 1/100.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Ox-RD Scanning - Anti-PCK1/PEPC antibody
[EPR6938] (ab133603)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-PCK1/PEPC antibody [EPR6938] (ab133603)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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