

Anti-PCB Antibody [JE40-24]

HA721546



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse, Rat, Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 130 kDa
Clone number:	JE40-24

Description: Pyruvate carboxylase (PC) encoded by the gene PC is an enzyme (EC 6.4.1.1) of the ligase class that catalyzes (depending on the species) the physiologically irreversible carboxylation of pyruvate to form oxaloacetate (OAA). It is an important anaplerotic reaction that creates oxaloacetate from pyruvate. PC contains a biotin prosthetic group and is typically localized to the mitochondria in eukaryotes with exceptions to some fungal species such as *Aspergillus nidulans* which have a cytosolic PC. PC requires magnesium and zinc or manganese for catalysis. PC from different organisms exhibit varying degrees of activation by acetyl-CoA, but vertebrate PC typically requires it for activity.

Immunogen: Synthetic peptide within Human PCB aa 1050-1150.

Positive control: Mouse liver tissue lysate, rat liver tissue lysate, mouse liver tissue.

Subcellular location: Mitochondrion matrix.

Database links: SwissProt: P11498 Human | Q05920 Mouse | P52873 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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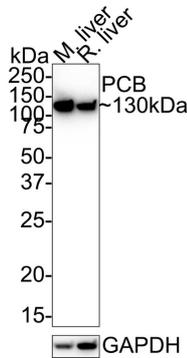
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Images

Fig1: Western blot analysis of PCB on different lysates with Rabbit anti-PCB antibody (HA721546) at 1/1,000 dilution.

Lane 1: Mouse liver tissue lysate

Lane 2: Rat liver tissue lysate



Lysates/proteins at 40 µg/Lane.

Predicted band size: 130 kDa

Observed band size: 130 kDa

Exposure time: 1 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721546) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

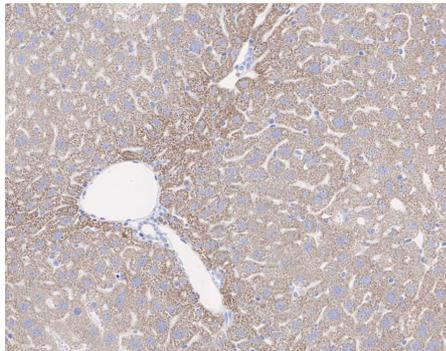


Fig2: Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Rabbit anti-PCB antibody (HA721546) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721546) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Kiesel VA et al. Pyruvate carboxylase and cancer progression. *Cancer Metab.* 2021 Apr
2. Schwörer S et al. Fibroblast pyruvate carboxylase is required for collagen production in the tumour microenvironment. *Nat Metab.* 2021 Nov

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