

PCB (m): 293T Lysate: sc-122419

BACKGROUND

Pyruvate carboxylase (PCB) is a biotinylated mitochondrial enzyme that catalyzes the synthesis of oxaloacetate from pyruvate in a tissue specific manner. In addition to covalently binding the biotin cofactor, PCB contains consensus sequences for the attachment of ATP and the substrate, pyruvate. The PCB gene is located on the long arm of chromosome 11. Mutations in PCB metabolism (pyruvate carboxylase deficiency) are known to cause lactic acidosis, hypoglycemia and mental retardation.

REFERENCES

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2. MacKay, N., et al. 1994. cDNA cloning of human kidney pyruvate carboxylase. *Biochem. Biophys. Res. Commun.* 202: 1009-1014.
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4. Innocenti, A., et al. 2004. Carbonic anhydrase inhibitors: inhibition of the membrane-bound human isozyme IV with anions. *Bioorg. Med. Chem. Lett.* 4: 5769-5773.
5. Karnik, D., et al. 2004. Hyperammonemia with citrullinemia. *Indian Pediatr.* 41: 842-844.
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7. Cline, G.W., et al. 2004. ¹³C NMR isotopomer analysis of anaplerotic pathways in INS-1 cells. *J. Biol. Chem.* 279: 44370-44375.
8. Hertz, L., et al. 2004. Intercellular metabolic compartmentation in the brain: past, present and future. *Neurochem. Int.* 45: 285-296.
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CHROMOSOMAL LOCATION

Genetic locus: Pcx (mouse) mapping to 19 A.

PRODUCT

PCB (m): 293T Lysate represents a lysate of mouse PCB transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

PCB (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PCB antibodies. Recommended use: 10-20 µl per lane.

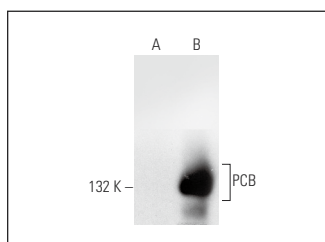
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PCB (E-5): sc-365672 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PCB expression in PCB transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

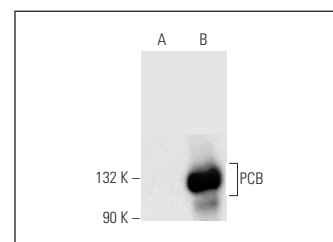
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PCB (E-5): sc-365672. Western blot analysis of PCB expression in non-transfected: sc-117752 (A) and mouse PCB transfected: sc-122419 (B) 293T whole cell lysates.



PCB (D-9): sc-365673. Western blot analysis of PCB expression in non-transfected: sc-117752 (A) and mouse PCB transfected: sc-122419 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.