



PCYT2 (m3): 293T Lysate: sc-110280

BACKGROUND

Phosphatidylethanolamine (PtdEtn) is a major membrane phospholipid which serves to play a primary role in cell membrane structure and is also involved in cell division, cell signaling, activation, phagocytosis and autophagy. PCYT2 (phosphorylethanolamine transferase), also known as ethanolamine-phosphate cytidylyltransferase, is a 389 amino acid protein that catalyzes the formation of CDP-ethanolamine from ethanolamine. This product combined with diacylglycerol form phosphatidylethanolamine via the *de novo* Kennedy pathway. PCYT2 is expressed at highest levels in heart, liver and skeletal muscle. Elevated levels of MyoD, reduced content of Sp1 and a changed ratio of Sp1 to Sp3 all together stimulate upregulation of PCYT2 transcription during C2C12 muscle cell differentiation. Disruption of the PCYT2 gene in mice leads to death after embryo implantation, establishing the necessity of PCYT2 for murine development.

REFERENCES

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6. Zhu, L., Michel, V. and Bakovic, M. 2009. Regulation of the mouse CTP:phosphoethanolamine cytidylyltransferase gene Pcyt2 during myogenesis. *Gene* 447: 51-59.
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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.

CHROMOSOMAL LOCATION

Genetic locus: Pcyt2 (mouse) mapping to 11 E2.

PRODUCT

PCYT2 (m3): 293T Lysate represents a lysate of mouse PCYT2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PCYT2 (m3): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PCYT2 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.

RESEARCH USE

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