

PDK1 (h): 293T Lysate: sc-113873

BACKGROUND

Mitochondrial pyruvate dehydrogenase (PDH) catalyzes the oxidative decarboxylation of pyruvate and plays a central role in the regulation of homeostasis of carbohydrate fuels in mammals. PDH activity is controlled by a phosphorylation/dephosphorylation cycle, phosphorylation leading to inactivation and dephosphorylation leading to reactivation of PDH. The phosphorylation of PDH is catalyzed by pyruvate dehydrogenase kinase (PDK), the activity of which is stimulated by the products of PDH catalysis. PDK1 consists of α and β subunits; the kinase activity resides in the α subunit. Three PDK isoenzymes have been identified in humans (PDK1, 2 and 3) and two have been identified in rodent (PDK1 and 2).

REFERENCES

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6. Behal, R.H., et al. 1993. Regulation of the pyruvate dehydrogenase multi-enzyme complex. *Annu. Rev. Nutr.* 13: 497-520.
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CHROMOSOMAL LOCATION

Genetic locus: PDK1 (human) mapping to 2q31.1.

PRODUCT

PDK1 (h): 293T Lysate represents a lysate of human PDK1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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.

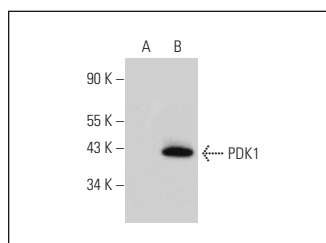
APPLICATIONS

PDK1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PDK1 antibodies. Recommended use: 10-20 μ l per lane.

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

PDK1 (E-10): sc-515944 is recommended as a positive control antibody for Western Blot analysis of enhanced human PDK1 expression in PDK1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



PDK1 (E-10): sc-515944. Western blot analysis of PDK1 expression in non-transfected: sc-117752 (A) and human PDK1 transfected: sc-113873 (B) 293T whole cell lysates.

RESEARCH USE

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