DCAKD (h): 293 Lysate: sc-113181



The Power to Question

BACKGROUND

Coenzyme A (CoA) is an essential cofactor used in numerous biochemical pathways. It plays a critical role in the synthesis and oxidation of fatty acids and is vital to the citric acid cycle. The biosynthesis pathway of CoA from pantothenic acid (also known as vitamin B5) is essential and universal in prokaryotes and eukaryotes. In humans, the final steps of the biosynthesis pathway are carried out by the bifunctional enzyme COASY. The sequence of these enzymes is highly conserved between different bacterial species. The phosphopantetheine adenylyltransferase and dephospho-coenzyme A kinase activities of COASY are evolutionarily conserved activities. DCAKD (dephospho-CoA kinase domain containing protein) is a 231 amino acid protein that consists of a dephospho-CoA kinase domain and an ATP nucleotide binding motif. Localizing to mitochondria and the cytosol, DCAKD belongs to the CoAE family which suggests that it may play a role in the biosynthesis of CoA.

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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.

CHROMOSOMAL LOCATION

Genetic locus: DCAKD (human) mapping to 17q21.31.

PRODUCT

DCAKD (h): 293 Lysate represents a lysate of human DCAKD transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

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

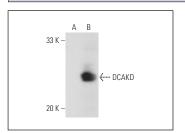
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-tranfected 293 cells.

DCAKD (SO-14): sc-100348 is recommended as a positive control antibody for Western Blot analysis of enhanced human DCAKD expression in DCAKD transfected 293 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-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



DCAKD (SQ-14): sc-100348. Western blot analysis of DCAKD expression in non-transfected: sc-110760 (**A**) and human DCAKD transfected: sc-113181 (**B**) 293 whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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

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