

DEC R1 (30-P): sc-130369

BACKGROUND

β -oxidation refers to the enzymatic process by which Acyl-CoA is catalytically broken down to yield Acetyl-CoA, the first molecule required for the Krebs cycle. DEC R1 (2,4-dienoyl-CoA reductase, mitochondrial), also known as DEC R, is a 335 amino acid mitochondrial protein that exists as a homotetramer and belongs to the family of short-chain dehydrogenases/reductases. Expressed in heart, pancreas, liver, lung, kidney and skeletal muscle, DEC R1 functions as an auxiliary enzyme of β -oxidation where it participates in the metabolism of unsaturated fatty enoyl-CoA esters. Specifically, DEC R1 uses NADP⁺ to catalyze the reduction of 2,4-dienoyl-CoA to yield trans-3-enoyl-CoA, which can then be used as an intermediate in the Krebs cycle. Additionally, DEC R1 is thought to function as a tumor suppressor, possibly downregulating the expression of Neu and slowing the rate of tumorigenesis.

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CHROMOSOMAL LOCATION

Genetic locus: DEC R1 (human) mapping to 8q21.3.

SOURCE

DEC R1 (30-P) is a mouse monoclonal antibody raised against recombinant DEC R1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DEC R1 (30-P) is recommended for detection of DEC R1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for DEC R1 siRNA (h): sc-77514, DEC R1 shRNA Plasmid (h): sc-77514-SH and DEC R1 shRNA (h) Lentiviral Particles: sc-77514-V.

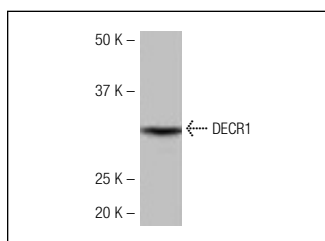
Molecular Weight of DEC R1: 36 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



DEC R1 (30-P): sc-130369. Western blot analysis of DEC R1 expression in Hep G2 whole cell lysate.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.