

## DECR2 (8D7): sc-134312

### BACKGROUND

DECR2 (2,4-dienoyl-CoA reductase 2), also known as PDCR (peroxisomal 2,4-dienoyl-CoA reductase) or SDR17C1, is a 292 amino acid member of the short-chain dehydrogenases/reductases (SDR) protein family and the 2,4-dienoyl-CoA reductase protein subfamily. Localized to the peroxisome, DECR2 is an auxiliary enzyme of  $\beta$ -oxidation that catalyzes the NADP-dependent reduction of 2,4-dienoyl-CoA to yield *trans*-3-enoyl-CoA. DECR2 has also been shown to have catalytic activity towards 2,4,7,10,13,16,19-docosaheptaenoyl-CoA and short and medium chain 2,4-dienoyl-CoAs, suggesting that DECR2 is not a rate limiting step in the degradation of docosaheptaenoic acid in the peroxisome. DECR2 is expressed as three isoforms produced by alternative splicing events.

### REFERENCES

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5. Persson, B., Kallberg, Y., Bray, J.E., Bruford, E., Dellaporta, S.L., Favia, A.D., Duarte, R.G., Jörnvall, H., Kavanagh, K.L., Kedishvili, N., Kisiela, M., Maser, E., Mindnich, R., Orchard, S., Penning, T.M., Thornton, J.M., et al. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. *Chem. Biol. Interact.* 178: 94-98.

### CHROMOSOMAL LOCATION

Genetic locus: DECR2 (human) mapping to 16p13.3.

### SOURCE

DECR2 (8D7) is a mouse monoclonal antibody raised against recombinant DECR2 protein of human origin.

### PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### STORAGE

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

### APPLICATIONS

DECR2 (8D7) is recommended for detection of DECR2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DECR2 siRNA (h): sc-93455, DECR2 shRNA Plasmid (h): sc-93455-SH and DECR2 shRNA (h) Lentiviral Particles: sc-93455-V.

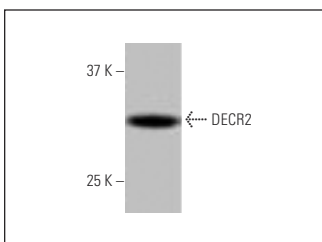
Molecular Weight of DECR2: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

### RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

### DATA



DECR2 (8D7): sc-134312. Western blot analysis of DECR2 expression in Jurkat whole cell lysate.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.