

RDHE2 (36-N): sc-100591

BACKGROUND

RDHE2 (epidermal retinal dehydrogenase 2), also known as EPHD-2 or retSDR2 (retinal short chain dehydrogenase reductase 2), is a member of the short-chain dehydrogenase/reductase (SDR) family of enzymes that catalyze the first step in the generation of retinaldehyde from retinol. Expressed ubiquitously at low levels with predominant expression in fetal and adult lung, fetal kidney and fetal skin, RDHE2 localizes to the membrane and is a multi-pass membrane protein. RDHE2 contains three motifs that are conserved in most of the SDR family members: a TGXXXGXG motif, a YXXXX motif (the active-site) and an LXNNAG motif. This implies that, similar to other SDR family members, RDHE2 may be involved in the retinol metabolism pathway. In addition, RDHE2 may play a role in the pathogenesis of psoriasis vulgaris, a chronic inflammatory skin disease. This is suggested by the significant upregulation of RDHE2 mRNA levels in the affected skin of psoriasis patients.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SDR16C5 (human) mapping to 8q12.1; Sdr16c5 (mouse) mapping to 4 A1.

SOURCE

RDHE2 (36-N) is a mouse monoclonal antibody raised against recombinant RDHE2 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

RDHE2 (36-N) is recommended for detection of RDHE2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 RDHE2 siRNA (h): sc-77583, RDHE2 siRNA (m): sc-152785, RDHE2 shRNA Plasmid (h): sc-77583-SH, RDHE2 shRNA Plasmid (m): sc-152785-SH, RDHE2 shRNA (h) Lentiviral Particles: sc-77583-V and RDHE2 shRNA (m) Lentiviral Particles: sc-152785-V.

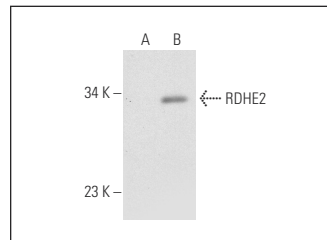
Molecular Weight of RDHE2: 34 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, RDHE2 (h2): 293T Lysate: sc-116966 or HeLa whole cell lysate: sc-2200.

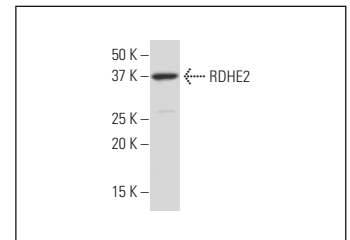
RECOMMENDED SUPPORT REAGENTS

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, 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



RDHE2 (36-N): sc-100591. Western blot analysis of RDHE2 expression in non-transfected: sc-117752 (A) and human RDHE2 transfected: sc-116966 (B) 293T whole cell lysates.



RDHE2 (36-N): sc-100591. Western blot analysis of RDHE2 expression in HeLa nuclear extract.

STORAGE

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

PROTOCOLS

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