



RDH2 (Y-12): sc-169131

BACKGROUND

Retinoids are metabolites of vitamin A (retinol) that represent an important group of signaling molecules during vertebrate development and tissue differentiation. RDH2 (retinol dehydrogenase 2), also known as RODH II (retinol dehydrogenase type II), is a 317 amino acid rat protein that functions as a short-chain dehydrogenase/reductase that participates in the first step of retinoic acid synthesis by catalyzing the conversion of retinol to retinal. Localizing to the endoplasmic reticulum and microsome, RDH2 interacts with CRBP (cellular retinol-binding protein) and belongs to the short-chain dehydrogenases/reductases (SDR) family. Involved in retinal metabolism, RDH2 is expressed in liver, brain, kidney, testis and lung. The gene encoding RDH2 maps to rat chromosome 7q22.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RDH2 (rat) mapping to 7q22.

SOURCE

RDH2 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RDH2 of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169131 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RDH2 (Y-12) is recommended for detection of RDH2 of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other RDH family members.

Molecular Weight of RDH2: 36 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.