

AKR1D1 (N-17): sc-67710

BACKGROUND

AKR1D1 (aldo-keto reductase family 1 member D1), also known as δ^4 -3-oxosteroid 5 β -reductase (3 α 5 β red) or steroid 5 β -reductase (SRD5B1), is responsible for catalyzing bile acid intermediates and steroid hormones possessing a δ^4 -3-one structure to 5 β reduced metabolites. The AKR family of proteins are soluble NADPH oxidoreductases. They play important roles in the metabolism of drugs, carcinogens and reactive aldehydes. AKR1D1 is highly expressed in liver, colon and testis. Substrates for AKR1D1 include Testosterone, androstenedione, Progesterone, 17 α -hydroxyprogesterone and the bile acid intermediates 7 α -hydroxy-4-cholesten-3-one and 7 α , 12 α -dihydroxy-4-cholesten-3-one. A deficiency in AKR1D1 may be involved in hepatic dysfunction.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: AKR1D1 (human) mapping to 7q32-q33; Akrd1 (mouse) mapping to 6 B1.

SOURCE

AKR1D1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of AKR1D1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-67710 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

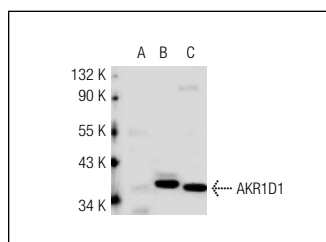
AKR1D1 (N-17) is recommended for detection of AKR1D1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

AKR1D1 (N-17) is also recommended for detection of AKR1D1 in additional species, including equine, canine, bovine and porcine.

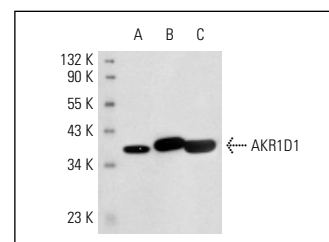
Suitable for use as control antibody for AKR1D1 siRNA (h): sc-61964 and AKR1D1 siRNA (m): sc-61965.

Molecular Weight of AKR1D1: 37 kDa.

DATA



AKR1D1 (N-17): sc-67710. Western blot analysis of AKR1D1 expression in non-transfected: sc-117752 (A) and mouse AKR1D1 transfected: sc-118319 (B) 293T whole cell lysates and mouse liver tissue extract (C).



AKR1D1 (N-17): sc-67710. Western blot analysis of AKR1D1 expression in Hep G2 whole cell lysate (A) and rat liver (B) and mouse liver (C) tissue extracts.

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.