

AKR1D1 Rabbit pAb

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Product Information

Application IHC-P, IHC-F, IF

Primary Accession P51857

Reactivity Mouse, Dog, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 37377
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human AKR1D1

Epitope Specificity 101-200/326

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm.

SIMILARITY Belongs to the aldo/keto reductase family.

DISEASE Congenital bile acid synthesis defect 2 (CBAS2) [MIM:235555]: A condition

characterized by jaundice, intrahepatic cholestasis and hepatic failure.

Patients with this liver disease show absence or low levels of

chenodeoxycholic acid and cholic acid in plasma and urine. Note=The disease

is caused by mutations affecting the gene represented in this entry.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions Efficiently catalyzes the reduction of progesterone, androstenedione,

17-alpha-hydroxyprogesterone and testosterone to 5-beta-reduced

metabolites. The bile acid intermediates

7-alpha,12-alpha-dihydroxy-4-cholesten-3-one and

7-alpha-hydroxy-4-cholesten-3-one can also act as substrates.

Additional Information

Gene ID 6718

Other Names Aldo-keto reductase family 1 member D1, 1.3.1.3, 3-oxo-5-beta-steroid

4-dehydrogenase, Delta(4)-3-ketosteroid 5-beta-reductase, Delta(4)-3-oxosteroid 5-beta-reductase, AKR1D1, SRD5B1

Target/Specificity Highly expressed in liver. Expressed in testis and weakly in colon.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

Protein Information

Name AKR1D1

Synonyms SRD5B1

Function Catalyzes the stereospecific NADPH-dependent reduction of the C4-C5

double bond of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure to yield an A/B cis-ring junction. This cis-configuration is crucial for bile acid biosynthesis and plays important roles in steroid metabolism. Capable of reducing a broad range of delta-(4)-3-ketosteroids from C18 (such as, 17beta- hydroxyestr-4-en-3-one) to C27 (such as,

7alpha-hydroxycholest-4-en-3- one).

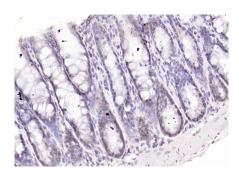
Cellular Location Cytoplasm.

Tissue Location Highly expressed in liver. Expressed in testis and weakly in colon.

Background

Efficiently catalyzes the reduction of progesterone, androstenedione, 17-alpha-hydroxyprogesterone and testosterone to 5-beta-reduced metabolites. The bile acid intermediates 7-alpha,12-alpha-dihydroxy-4-cholesten-3-one and 7-alpha-hydroxy-4-cholesten-3-one can also act as substrates.

Images



Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AKR1D1) Polyclonal Antibody, Unconjugated (AP58262) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.