

**AKR1D1 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP58262****Specification**

---

**AKR1D1 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">P51857</a>
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human AKR1D1
Epitope Specificity	101-200/326
Isotype	IgG
<b>Purity</b>	
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.

**AKR1D1 Polyclonal Antibody - 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 ~ N/A  
IHC-F ~ N/A  
IF ~ 1:50 ~ 200  
E ~ N/A

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glycerol

**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 is stable for at least two weeks at 2-4 °C.

**AKR1D1 Polyclonal 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.

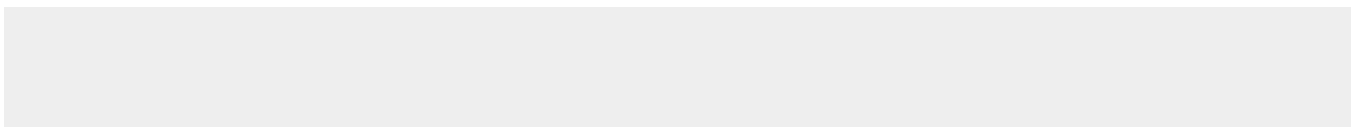
**Tissue Location**

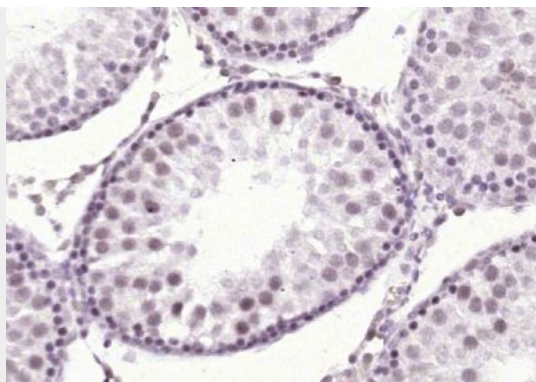
Highly expressed in liver. Expressed in testis and weakly in colon.

**AKR1D1 Polyclonal Antibody - Protocols**

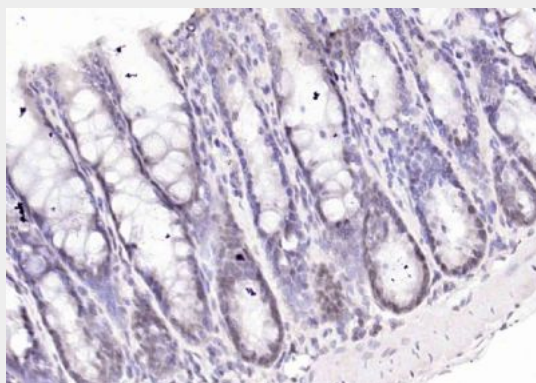
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**AKR1D1 Polyclonal Antibody - Images**



Paraformaldehyde-fixed, paraffin embedded (rat testis); 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 (bs-5026R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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 (bs-5026R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.