

#### AKR1D1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16670C

#### Specification

## **AKR1D1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<u>P51857</u>
Other Accession	<u>NP_005980.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37377
Antigen Region	111-139

## **AKR1D1 Antibody (Center) - Additional Information**

#### Gene ID 6718

Other Names

3-oxo-5-beta-steroid 4-dehydrogenase, Aldo-keto reductase family 1 member D1, Delta(4)-3-ketosteroid 5-beta-reductase, Delta(4)-3-oxosteroid 5-beta-reductase, AKR1D1, SRD5B1

Target/Specificity

This AKR1D1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 111-139 amino acids from the Central region of human AKR1D1.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AKR1D1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **AKR1D1** Antibody (Center) - 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 Antibody (Center) - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### AKR1D1 Antibody (Center) - Images



AKR1D1 Antibody (Center) (Cat. #AP16670c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the AKR1D1 antibody detected the AKR1D1 protein (arrow).

# AKR1D1 Antibody (Center) - Background

The enzyme encoded by this gene is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure. Deficiency of this enzyme may contribute to hepatic dysfunction. Three transcript variants encoding different isoforms have been found for this gene.



Other variants may be present, but their full-length natures have not been determined yet.

## **AKR1D1** Antibody (Center) - References

Steen, N.E., et al. Prog. Neuropsychopharmacol. Biol. Psychiatry (2010) In press : Drury, J.E., et al. J. Biol. Chem. 285(32):24529-24537(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Ueki, I., et al. J. Gastroenterol. Hepatol. 24(5):776-785(2009) Panagopoulos, I., et al. Oncol. Rep. 21(3):615-624(2009)