

### **AKR1C1 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50969

### **Specification**

## **AKR1C1 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC-P, E
O04828
Human, Mouse, Rat
Rabbit
Polyclonal
37 KDa

## **AKR1C1 Antibody - Additional Information**

#### **Gene ID 1645**

#### **Other Names**

Aldo-keto reductase family 1 member C1, 111-, 20-alpha-hydroxysteroid dehydrogenase, 20-alpha-HSD, Chlordecone reductase homolog HAKRC, Dihydrodiol dehydrogenase 1/2, DD1/DD2, High-affinity hepatic bile acid-binding protein, HBAB, Indanol dehydrogenase, Trans-1, 2-dihydrobenzene-1, 2-diol dehydrogenase, AKR1C1, DDH, DDH1

#### **Dilution**

WB~~1:1000 IHC-P~~N/A E~~N/A

#### **Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

## **Storage**

Store at -20 °C. Stable for 12 months from date of receipt

## **AKR1C1 Antibody - Protein Information**

# Name AKR1C1

Synonyms DDH, DDH1

### **Function**

Cytosolic aldo-keto reductase that catalyzes the NADH and NADPH-dependent reduction of ketosteroids to hydroxysteroids (PubMed:<a href="http://www.uniprot.org/citations/19218247" target="\_blank">19218247</a>). Most probably acts as a reductase in vivo since the oxidase activity measured in vitro is inhibited by physiological concentrations of NADPH (PubMed:<a href="http://www.uniprot.org/citations/14672942" target="\_blank">14672942</a>). Displays a broad positional specificity acting on positions 3, 17 and 20 of steroids and regulates the metabolism of hormones like estrogens and androgens (PubMed:<a



href="http://www.uniprot.org/citations/10998348" target="\_blank">10998348</a>). May also reduce conjugated steroids such as 5alpha- dihydrotestosterone sulfate (PubMed:<a href="http://www.uniprot.org/citations/19218247" target="\_blank">19218247</a>). Displays affinity for bile acids (PubMed:<a href="http://www.uniprot.org/citations/8486699" target=" blank">8486699</a>).

Cellular Location Cytoplasm, cytosol.

## **Tissue Location**

Expressed in all tissues tested including liver, prostate, testis, adrenal gland, brain, uterus, mammary gland and keratinocytes. Highest levels found in liver, mammary gland and brain

### **AKR1C1 Antibody - Protocols**

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

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

## **AKR1C1 Antibody - Images**

### **AKR1C1 Antibody - Background**

Converts progesterone to its inactive form, 20-alpha- dihydroxyprogesterone (20-alpha-OHP). In the liver and intestine, may have a role in the transport of bile. May have a role in monitoring the intrahepatic bile acid concentration. Has a low bile-binding ability. May play a role in myelin formation.

# **AKR1C1 Antibody - References**

Stolz A., et al. J. Biol. Chem. 268:10448-10457(1993). Lou H., et al. J. Biol. Chem. 269:8416-8422(1994). Ciaccio P. J., et al. J. Biol. Chem. 269:15558-15562(1994). Khanna M., et al. J. Steroid Biochem. Mol. Biol. 53:41-46(1995). Nishizawa M., et al. Genes Cells 5:111-125(2000).