

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

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:19218247). Most probably acts as a reductase in vivo since the oxidase activity measured in vitro is inhibited by physiological concentrations of NADPH (PubMed:14672942). 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:10998348). May also reduce conjugated steroids such as 5alpha- dihydrotestosterone sulfate (PubMed:19218247). Displays affinity for bile acids (PubMed:8486699).



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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- 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).