

AKR1C2 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50743**Specification****AKR1C2 Antibody - Product Information**

Application	WB
Primary Accession	P52895
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38,16 KDa
Antigen Region	34-63

AKR1C2 Antibody - Additional Information**Gene ID** 1646**Other Names**

Aldo-keto reductase family 1 member C2, 1---, 3-alpha-HSD3, Chlordecone reductase homolog HAKRD, Dihydrodiol dehydrogenase 2, DD-2, DD2, Dihydrodiol dehydrogenase/bile acid-binding protein, DD/BABP, Trans-1, 2-dihydrobenzene-1, 2-diol dehydrogenase, Type III 3-alpha-hydroxysteroid dehydrogenase, AKR1C2, DDH2

Dilution

WB~~1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

AKR1C2 Antibody - Protein Information**Name** AKR1C2**Synonyms** DDH2**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:14672943).

href="http://www.uniprot.org/citations/10998348" target="_blank">>10998348). Works in concert with the 5-alpha/5-beta-steroid reductases to convert steroid hormones into the 3-alpha/5-alpha and 3- alpha/5-beta-tetrahydrosteroids. Catalyzes the inactivation of the most potent androgen 5-alpha-dihydrotestosterone (5-alpha-DHT) to 5-alpha-androstan-3-alpha,17-beta-diol (3-alpha-diol) (PubMed:>15929998, PubMed:>17034817, PubMed:>17442338, PubMed:>8573067). Also specifically able to produce 17beta-hydroxy-5alpha-androstan-3-one/5alphaDHT (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.

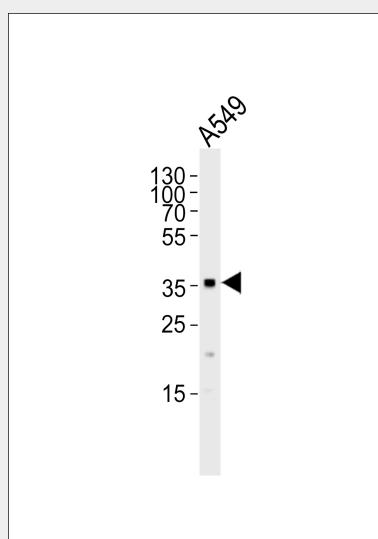
Tissue Location

Expressed in fetal testes. Expressed in fetal and adult adrenal glands.

AKR1C2 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](#)

AKR1C2 Antibody - Images

Western blot analysis of lysate from A549 cell line, using AKR1C2 Antibody(AP50743). AP50743 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

AKR1C2 Antibody - Background

Works in concert with the 5-alpha/5-beta-steroid reductases to convert steroid hormones into the 3-alpha/5-alpha and 3-alpha/5-beta-tetrahydrosteroids. Catalyzes the inactivation of the most potent androgen 5-alpha-dihydrotestosterone (5-alpha-DHT) to 5-alpha-androstan-3-alpha,17-beta-diol (3-alpha-diol). Has a high bile-binding ability.

AKR1C2 Antibody - References

- Qin K.-N., et al. J. Steroid Biochem. Mol. Biol. 46:673-679(1993).
Ciaccio P.J., et al. Biochim. Biophys. Acta 1186:129-132(1994).
Qin K.-N., et al. Gene 149:357-361(1994).
Dufort I., et al. Biochem. Biophys. Res. Commun. 228:474-479(1996).
Shiraishi H., et al. Biochem. J. 334:399-405(1998).