DATASHEET

AKR1C2 Rabbit Polyclonal Antibody

CAT. NO. APA10205

KEY FEATURES

Target	AKR1C2	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Cytosolic aldo-keto reductase that catalyzes NADPH-dependent reduction of ketosteroids to hydroxysteroids. Displays broad substrate specificity with distinct positional and stereochemistry, primarily generating 3alpha-hydroxysteroids, but also 3beta-, 17beta- and 20alpha-hydroxysteroids . Required for male sex determination as a component of the 'backdoor' androgen biosynthesis pathway that generates 5alpha-dihydrotestosterone (5alpha-DHT) via pregnanes. Acts together with AKR1C4 to convert 5alpha-dihydroprogesterone (5alpha-DHP) to 3alpha-hydroxy-5alpha-pregnan-20-one (3alpha,5alpha-THP/allopregnanolone), leading to 5alpha-DHT secretion necessary for embryonic gonad differentiation into testis .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to AKR1C2
Specificity	Recognizes endogenous levels of AKR1C2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human AKR1C2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 36 kD; Observed: 37 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	DDH2; Aldo-keto reductase family 1 member C2; 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
Gene Symbol	AKR1C2
Entrez Gene	1646(Human)
SwissProt	P52895(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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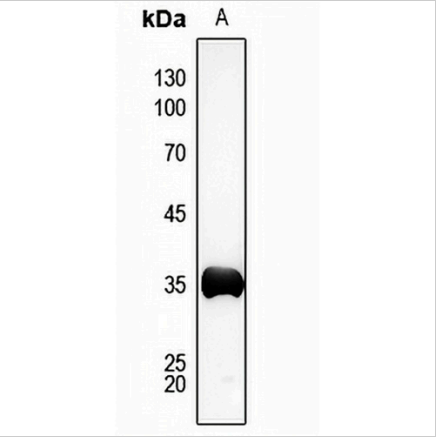
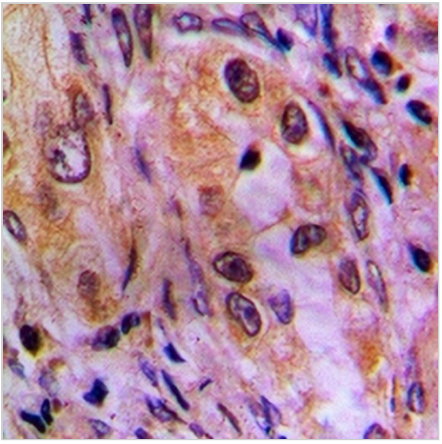
DATA



Western blot analysis of AKR1C2 expression in mouse liver (A) whole cell lysates. (Predicted band size: 36 kD; Observed band size: 37 kD)



Immunohistochemical analysis of AKR1C2 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.