

AKR1A1 Antibody (CT)

ALTERNATE NAMES: AKR1A1; ALDR1; ALR; Alcohol dehydrogenase [NADP(+)]; Aldehyde reductase; Aldo-keto reductase family 1 member A1

CATALOG #: 6738-100

AMOUNT: 100 µl

HOST/ISOTYPE: Rabbit IgG

IMMUNOGEN: This AKR1A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 293-325 amino acids from the C-terminal region of human AKR1A1.

PURIFICATION: This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

MOLECULAR WEIGHT: ~36.57 kDa

FORM: Liquid

FORMULATION: Supplied in PBS with 0.09% (W/V) sodium azide.

SPECIES REACTIVITY: Human. Predicted cross reactivity with Mouse, Rat, Bovine and Pig samples.

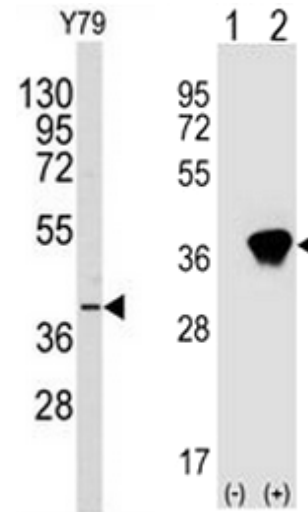
STORAGE CONDITIONS: Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

DESCRIPTION: AKR1A1 (aldo-keto reductase family 1 member A1), also known as ALR (aldehyde reductase), DD3 (dihydrodiol dehydrogenase 3) or ALDR1 (alcohol dehydrogenase), is a widely and abundantly expressed member of the aldo-keto reductase (AKR) family of proteins. Members of the AKR family are soluble NADPH-dependent oxidoreductases. They play important roles in the metabolism of drugs, carcinogens and reactive aldehydes. AKR1A1 exists as a monomer and catalyzes the reduction of xenobiotic and biogenic aldehydes and ketones to their corresponding alcohols. In particular, AKR1A1 efficiently catalyzes medium-chain and aromatic aldehydes. AKR1A1 participates in the biosynthetic pathways of cholesterol and triglyceride and plays a role in the activation of polycyclic aromatic hydrocarbons (PAHs).

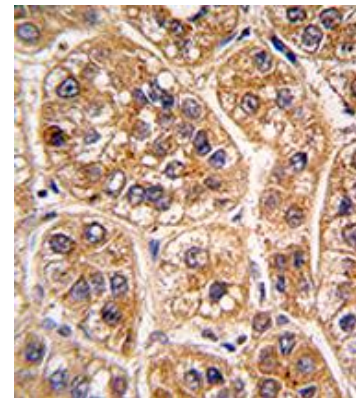
APPLICATION: Western blot: ~1:1000, IHC: ~1:10 – 1:50

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

FOR RESEARCH USE ONLY! Not to be used on humans.



AKR1A1 Antibody western blot analysis in Y79 cell line lysates (35 µg/lane) and 293 cell lysates (2 µg/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2).



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with AKR1A1 antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

RELATED PRODUCTS:

- Human recombinant ALDH2 (Cat. No. 6332-100)
- Human recombinant ALDH3A1 (Cat. No. 6333-50)
- Human recombinant AKR7A3 (Cat. No. 6334-50)
- Human recombinant AKR7A2 (Cat. No. 6335-50)
- Human recombinant AKR1C1 (Cat. No. 6336-50)
- Human recombinant AKR1C3 (Cat. No. 6337-50)
- Human recombinant AKR1B10 (Cat. No. 6339-50)