

# 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.

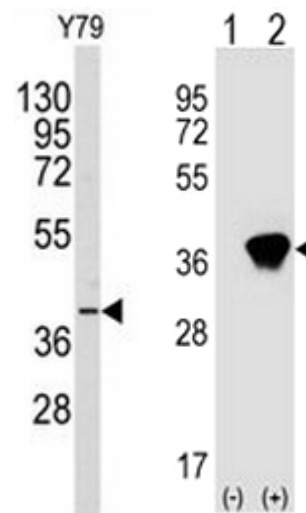
**STORAGE CONDITIONS:** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

**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).

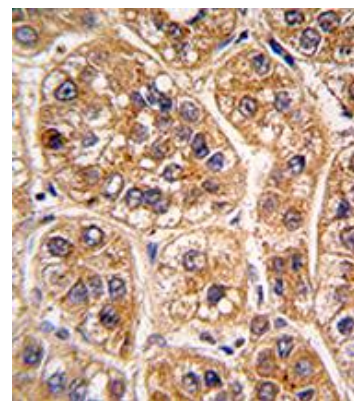
**APPLICATION:** Western blot: ~1:1000, IHC: ~1:10 – 1:50

**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)

