

## AKR1C1 polyclonal antibody

Catalog: BS60589

Host: Rabbit

Reactivity: Human, Mouse, Rat

### Background:

Human liver contains isoforms of dihydrodiol dehydrogenase (DD1, DD2, DD3 and DD4), which belong to the aldo-oxo reductase/aldo-keto reductase (AKR) superfamily, have 20 $\alpha$ - or 3 $\alpha$ -hydroxysteroid dehydrogenase (HSD) activity. DD1 is also designated AKR1C1, DDH or DDH1, while DD2 also can be designated AKR1C2, dDD, BABP or DDH2. AKR1C3 and 3 $\alpha$ -HSD are alternate designations for human DD3 (which is referred to as AKR1C18 in rodents), while DD4 also can be called AKR1C4, CD, CHDR or AKR1C6 (in rodents). DD1 and DD2 are 20 $\alpha$ -HSDs, whereas DD3 and DD4 are the 3 $\alpha$ -HSDs. The multiple human cytosolic dihydrodiol dehydrogenases are involved in the metabolism of xenobiotics, such as polycyclic aromatic hydrocarbons, pesticides and steroid hormones, and are responsible for the reduction of ketone-containing drugs by using NADH or NADPH as a cofactor. The 20 $\alpha$ -HSD catalyzes the reaction of progesterone to the inactive form 20 $\alpha$ -hydroxyprogesterone. The 3 $\alpha$ -HSD is a cytosolic, monomeric, NADPH-dependent oxidoreductase that reduces 3-keto-5-dihydrosteroids to their tetrahydro products. DD1 and DD2 are ubiquitously expressed, whereas DD4 mRNA is restricted to the liver. DD3 is a unique enzyme that can specifically catalyze the dehydrogenation of trans-benzenedihydrodiol and trans-naphthalenedihydrodiol.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 37 kDa

### Swiss-Prot:

Q04828

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

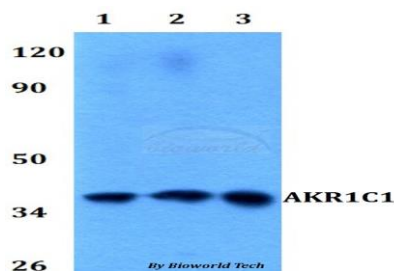
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

AKR1C1 polyclonal antibody detects endogenous levels of AKR1C1 protein.

### DATA:



Western blot (WB) analysis of AKR1C1 polyclonal antibody at 1:500 dilution

Lane1:HEK293T whole cell lysate

Lane2:Raw264.7 whole cell lysate

Lane3:PC12 whole cell lysate

### Note:

For research use only, not for use in diagnostic procedure.

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