

# Human Aldo-keto Reductase 1C1/AKR1C1 antibody

Catalog Number: ATGA0201

## PRODUCT INFORMATION

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**Catalog number**

ATGA0201

**Clone No.**

AT6D10

**Product type**

Monoclonal Antibody

**UnitProt No.**

Q04828

**NCBI Accession No.**

NP\_001344

**Alternative Names**

Aldo-keto reductase family 1 member C1, DDH1, DDH, MBAB, DD1, HAKRC, Dihydrodiol dehydrogenase 1, 20-alpha (3-alpha)-hydroxysteroid dehydrogenase, High-affinity hepatic bile acid-binding protein (HBAB)

## PRODUCT SPECIFICATION

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human AKR1C1 (1-323aa) purified from E. coli

**Isotype**

IgG1 kappa

**Purification Note**

By protein-G affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**Usage**

The antibody has been tested by ELISA, Western blot, ICC/IF and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

# Human Aldo-keto Reductase 1C1/AKR1C1 antibody

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## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

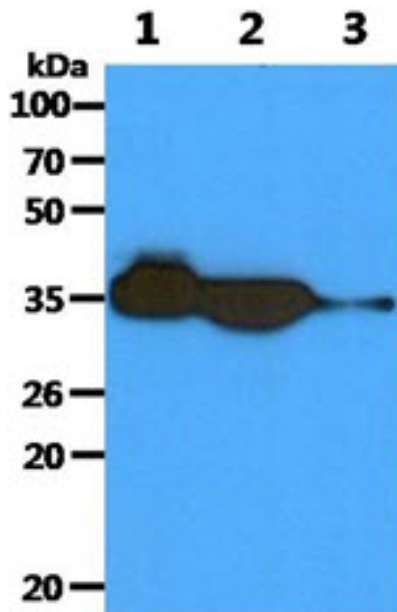
The human aldo-keto reductases 1C1 and 1C3 (AKR1C1 and AKR1C3) have major roles in pre receptor regulation of progesterone action. They can both convert progesterone to the less potent efficiencies. AKR1C1 and AKR1C3 also act as 3-ketosteroid reductase, and as such they can convert the most potent androgen 5alpha-DHT into 3beta-andorstandiol, which is an estrogen receptor beta ligand, and into the inactive androgen 3alpha-androstnionl, respectively.

### General References

- L.C. Giudice, et al. (2004) Lancet. 3644: 1789-1799.
- P.G. Hompes, et al. (2007) Gynecol. Endocrinol. 23: 5-12.
- K.J. Berkley, et al. (2005) Science 308: 1587-1589.

## DATA

### Western blot analysis (WB)



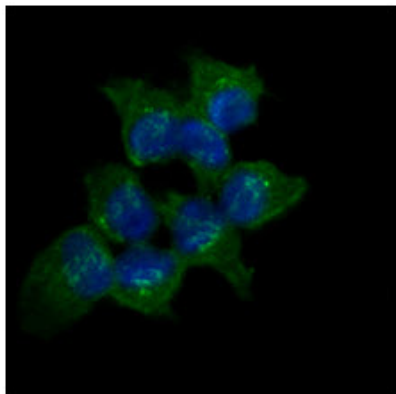
The Recombinant protein (50ng) and Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AKR1C1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

- Lane 1. : Recombinant Human AKR1C1
- Lane 2. : HepG2 cell lysate
- Lane 3. : Raji cell lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

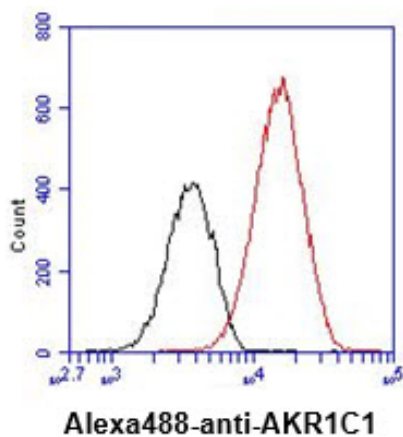
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ICC/IF analysis of AKR1C1 in A431 cells. The cell was stained with ATGA0201 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

## Flow cytometry (FACS)



Flow cytometry analysis of AKR1C1 in A431 cell line, staining at 2-5ug for  $1 \times 10^6$  cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).