

Uniprot ID: [P52895](#)

# AKR1C2-1

Protein name: AK1C2\_HUMAN

Full name: Aldo-keto reductase family 1 member C2

Protein existence: evidence at protein level

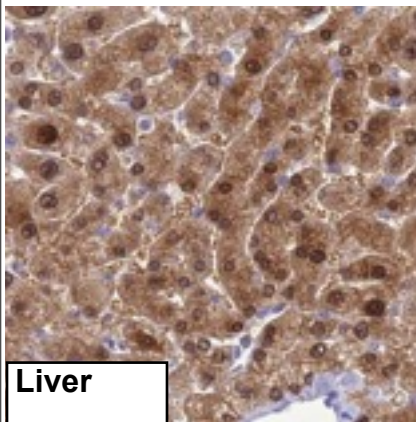
Function: Works in concert with the 5-alpha/5-beta-steroid reductases to convert steroid hormones into the 3-alpha/5-alpha and 3-alpha/5-beta-tetrahydrosteroids. Catalyzes the inactivation of the most potent androgen 5-alpha-dihydrotestosterone (5-alpha-DHT) to 5-alpha-androstane-3-alpha,17-beta-diol (3-alpha-diol). Has a high bile-binding ability.

Subcellular location: Cytoplasm (potential).

Three antibodies: AKR1C2-1, AKR1C2-2 and AKR1C2-3 were tested. All were approved for IHC, AKR1C2-1 were selected for full protein profiling.

## AKR1C2-1 (CAB047304)

OK



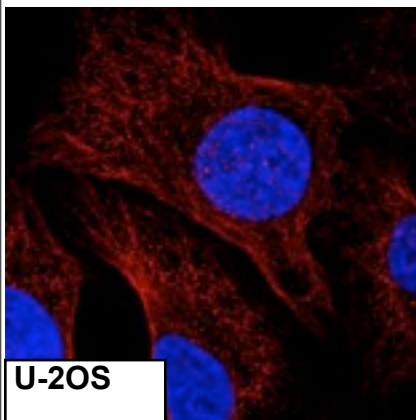
### Immunohistochemistry

IHC protocol: HIER pH 6, Dilution 1:25000

IHC test staining: **Strong staining of normal/cancer liver and urinary bladder. Weaker in few remaining tissues.**

### IHC Annotators comments

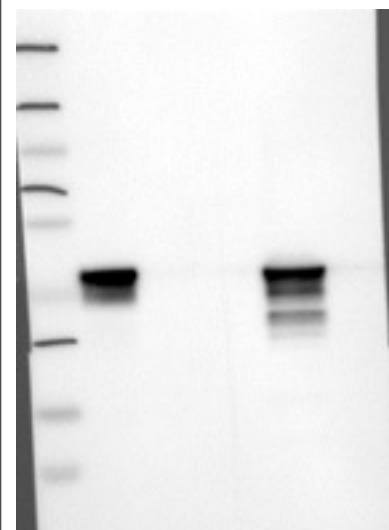
Strong cytoplasmic and nuclear positivity was observed in hepatocytes, urinary bladder and stomach. A subset of glandular cells in small intestine and exocrine glandular cells in pancreas along with oral mucosa, esophagus, nasopharynx and Leydig cells were moderately stained. Remaining normal tissues were in general negative.



### Immunofluorescence

IF Overlay: antibody (green), anti-tubuline (red) and DAPI (blue)

IF Localization: No staining was observed in any of the three cell lines



### Western blot

WB Size markers (kDa): 250, 130, 95, 72, 55, 36, 28, 17, 11

WB Lanes: Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

WB Target weight (kDa): 37, 34, 37, 16

WB Validation: Supportive - Band of predicted size in kDa (+/-20%) with additional bands present.