

AKR1C2 Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	37	Rabbit	#P52895	1646

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

AKR1C2 Antibody recognizes endogenous levels of total AKR1C2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val61 of human AKR1C2 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Aldo-keto reductase family 1 member C2 (AKR1C2) is a member of a large superfamily of aldo-keto reductases that metabolize an array of substrates in a NADPH-dependent manner. AKR1C2 is the 3- α -hydroxysteroid dehydrogenase (3 α -HSD) responsible for metabolizing and inactivating the androgen hormone 5 α -dihydrotestosterone (DHT) to 3 α -androstenediol (1). Research studies demonstrate an increase in AKR1C2 expression in cases of advanced prostate cancer (2). Both AKR1C2 and the related reductase, AKR1C3, are implicated in enhancing PI3K/Akt signaling in prostate cancer by reducing prostaglandin D2 to the more stable 9 α , 11 β -PGF2 α (2). In addition, research studies demonstrate an increase in AKR1C2 expression in some ovarian endometriosis specimens, suggesting the participation of AKR1C2 in the promotion of progesterone metabolism in ovarian endometriosis (3).

Background References

1. Rizner, T.L. et al. (2003) *Chem Biol Interact* 143-144, 401-9.
2. Wang, S. et al. (2008) *Mol Cell Endocrinol* 289, 60-6.
3. Hevir, N. et al. (2011) *Chem Biol Interact* 191, 217-26.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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