

**AKR1C1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14485b****Specification**

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**AKR1C1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q04828](#)**AKR1C1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 1645**Other Names**

Aldo-keto reductase family 1 member C1, 111-, 20-alpha-hydroxysteroid dehydrogenase, 20-alpha-HSD, Chlordecone reductase homolog HAKRC, Dihydrodiol dehydrogenase 1/2, DD1/DD2, High-affinity hepatic bile acid-binding protein, HBAB, Indanol dehydrogenase, Trans-1, 2-dihydrobenzene-1, 2-diol dehydrogenase, AKR1C1, DDH, DDH1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**AKR1C1 Antibody (C-term) Blocking Peptide - Protein Information****Name** AKR1C1**Synonyms** DDH, DDH1**Function**

Cytosolic aldo-keto reductase that catalyzes the NADH and NADPH-dependent reduction of ketosteroids to hydroxysteroids (PubMed:<a href="http://www.uniprot.org/citations/19218247" target="\_blank">19218247</a>). Most probably acts as a reductase in vivo since the oxidase activity measured in vitro is inhibited by physiological concentrations of NADPH (PubMed:<a href="http://www.uniprot.org/citations/14672942" target="\_blank">14672942</a>). Displays a broad positional specificity acting on positions 3, 17 and 20 of steroids and regulates the metabolism of hormones like estrogens and androgens (PubMed:<a href="http://www.uniprot.org/citations/10998348" target="\_blank">10998348</a>). May also reduce conjugated steroids such as 5alpha- dihydrotestosterone sulfate (PubMed:<a href="http://www.uniprot.org/citations/19218247" target="\_blank">19218247</a>). Displays affinity for bile acids (PubMed:<a href="http://www.uniprot.org/citations/8486699" target="\_blank">8486699</a>).

**Cellular Location**

Cytoplasm, cytosol.

**Tissue Location**

Expressed in all tissues tested including liver, prostate, testis, adrenal gland, brain, uterus, mammary gland and keratinocytes. Highest levels found in liver, mammary gland and brain

**AKR1C1 Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**AKR1C1 Antibody (C-term) Blocking Peptide - Images****AKR1C1 Antibody (C-term) Blocking Peptide - Background**

This gene encodes a member of the aldo/keto reductasesuperfamily, which consists of more than 40 known enzymes andproteins. These enzymes catalyze the conversion of aldehydes andketones to their corresponding alcohols by utilizing NADH and/orNADPH as cofactors. The enzymes display overlapping but distinctsubstrate specificity. This enzyme catalyzes the reaction ofprogesterone to the inactive form 20-alpha-hydroxy-progesterone.This gene shares high sequence identity with three other genemembers and is clustered with those three genes at chromosome10p15-p14.

**AKR1C1 Antibody (C-term) Blocking Peptide - References**

Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)Wang, X., et al. PLoS ONE 5 (8), E11934 (2010) :Reding, K.W., et al. Am. J. Epidemiol. 170(10):1241-1249(2009)Chien, C.W., et al. Carcinogenesis 30(10):1813-1820(2009)Davies, N.J., et al. Cancer Res. 69(11):4769-4775(2009)