10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

AKR1C1 Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP5331c

Specification

AKR1C1 Antibody (Center) Blocking peptide - Product Information

Primary Accession	Q04828
Other Accession	NP_001344.2

AKR1C1 Antibody (Center) 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 (Center) 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:19218247). Most probably acts as a reductase in vivo since the oxidase activity measured in vitro is inhibited by physiological concentrations of NADPH (PubMed:14672942). 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:10998348). May also reduce conjugated steroids such as 5alpha- dihydrotestosterone sulfate (PubMed:19218247). Displays affinity for bile acids (PubMed:8486699).

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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 (Center) Blocking peptide - Protocols

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

- Blocking Peptides

AKR1C1 Antibody (Center) Blocking peptide - Images

AKR1C1 Antibody (Center) Blocking peptide - Background

AKR1C1 encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reaction of progesterone to the inactive form 20-alpha-hydroxy-progesterone. This protein shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14.

AKR1C1 Antibody (Center) Blocking peptide - References

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)