

Recombinant Human AKR1C1 cell lysate

Cat. No. AKR1C1-48HCL **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species	Human
Description	This gene 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 gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14.
Size	100 ul
Storage Buffer	1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)
Applications	Western Blot;

GENE INFORMATION

Gene Name	AKR1C1 aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase) [Homo sapiens]
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Official Symbol	AKR1C1
Synonyms	AKR1C1; aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase); DDH1; aldo-keto reductase family 1 member C1; DD1; DDH; HAKRC; MBAB; aldo-keto reductase C; indanol dehydrogenase; dihydrodiol dehydrogenase 1; dihydrodiol dehydrogenase 1/2; hepatic dihydrodiol dehydrogenase; chlordecone reductase homolog HAKRC; 20 alpha-hydroxysteroid dehydrogenase; 20-alpha-hydroxysteroid dehydrogenase; dihydrodiol dehydrogenase isoform DD1; type II 3-alpha-hydroxysteroid dehydrogenase; high-affinity hepatic bile acid-binding protein; trans-1,2-dihydrobenzene-1,2-diol dehydrogenase; C9; H-37; HBAB; DD1/DD2; 2-ALPHA-HSD; 20-ALPHA-HSD; MGC8954;
Gene ID	1645
mRNA Refseq	NM_001353
Protein Refseq	NP_001344
MIM	600449
UniProt ID	Q04828
Chromosome Location	10p15-p14
Pathway	Metabolism of xenobiotics by cytochrome P450, organism-specific biosystem; Metabolism of xenobiotics by cytochrome P450, conserved biosystem; Steroid hormone biosynthesis, organism-specific biosystem; Steroid hormone biosynthesis, conserved biosystem;

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Function

17-alpha,20-alpha-dihydroxypregn-4-en-3-one dehydrogenase activity; alditol:NADP+ 1-oxidoreductase activity; aldo-keto reductase (NADP) activity; androsterone dehydrogenase (B-specific) activity; bile acid binding; carboxylic acid binding; indanol dehydrogenase activity; ketosteroid monooxygenase activity; oxidoreductase activity; oxidoreductase activity, acting on NADH or NADPH, quinone or similar compound as acceptor; phenanthrene 9,10-monooxygenase activity; trans-1,2-dihydrobenzene-1,2-diol dehydrogenase activity;

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