



# AK1C4 Monoclonal Antibody

Catalog No	YP-mAb-05303
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	AKR1C4 CHDR
Protein Name	Aldo-keto reductase family 1 member C4 (EC 1.1.1.-) (3-alpha-HSD1) (3-alpha-hydroxysteroid dehydrogenase type I) (EC 1.1.1.50) (Chlordecone reductase) (CDR) (EC 1.1.1.225) (Dihydrodiol dehydrogenase 4
Immunogen	Synthesized peptide derived from human protein . at AA range: 1-80
Specificity	AK1C4 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	35kD
Cell Pathway	Cytoplasm, cytosol .
Tissue Specificity	Liver specific.
Function	catalytic activity:Androsterone + NAD(P)(+) = 5-alpha-androstane-3,17-dione + NAD(P)H.,catalytic activity:Chlordecone alcohol + NADP(+) = chlordecone + NADPH.,function:Catalyzes the transformation of the potent androgen dihydrotestosterone (DHT) into the less active form, 5-alpha-androstan-3-alpha,17-beta-diol (3-alpha-diol). Also has some 20-alpha-hydroxysteroid dehydrogenase activity. The biotransformation of the pesticide chlordecone (kepone) to its corresponding alcohol leads to increased biliary excretion of the pesticide and concomitant reduction of its neurotoxicity since bile is the major excretory route.,polymorphism:The allele with Cys-145/Val-311 shows a three- to five-fold decrease in catalytic efficiency for xenobiotic and steroidal substrates compared to the Ser-145/Leu-311 allele.,PTM:The N-terminus is blocked.,similarity:Belongs to the aldo/keto reductase family.,subunit:



## Background

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 bioreduction of chlordecone, a toxic organochlorine pesticide, to chlordecone alcohol in liver. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. [provided by RefSeq, Jul 2008],

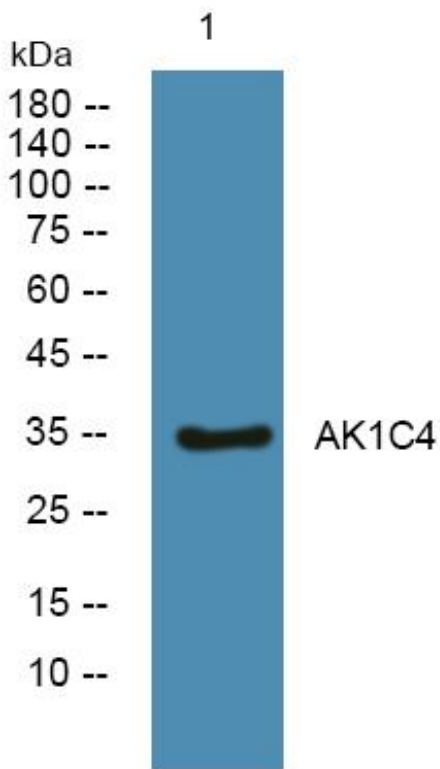
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using AK1C4 Monoclonal Antibody