Product Name: **DD2 Rabbit Polyclonal Antibody**
Catalog #: **APRab09857**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	37kDa

Antigen Information

Gene Name	AKR1C2
Alternative Names	AKR1C2; DDH2; Aldo-keto reductase family 1 member C2; 3-alpha-HSD3; Chlordecone reductase homolog HAKRD; Dihydrodiol dehydrogenase 2; DD-2; DD2; Dihydrodiol dehydrogenase/bile acid-binding protein; DD/BABP; Trans-1; 2-dihydrobenzene-1,2-diol
Gene ID	1646.0
SwissProt ID	P52895
Immunogen	The antiserum was produced against synthesized peptide derived from human AKR1C2. AA range:21-70

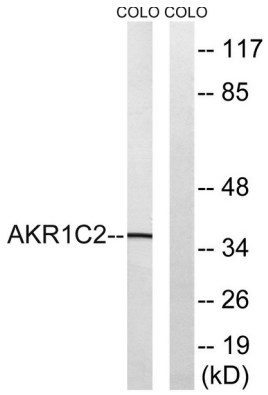
Background

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 using NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme binds bile acid with high affinity, and shows minimal 3-alpha-hydroxysteroid dehydrogenase activity. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Dec 2011],catalytic activity:Androsterone + NAD(P)(+) = 5-alpha-androstane-3,17-dione + NAD(P)H.,catalytic activity:Trans-1,2-dihydrobenzene-1,2-diol + NADP(+) = catechol + NADPH.,enzyme regulation:Inhibited by hexestrol with an IC(50) of 2.8 uM, 1,10-phenanthroline with an IC(50) of 2100 uM, 1,7-phenanthroline with an IC(50) of 1500 uM, flufenamic acid with an IC(50) of 0.9 uM, indomethacin with an IC(50) of 75 uM, ibuprofen with an IC(50) of 6.9 uM, lithocholic acid with an IC(50) of 0.07 uM, ursodeoxycholic acid with an IC(50) of 0.08 uM and chenodeoxycholic acid with an IC(50) of 0.13 uM.,function:Works in concert with the 5-alpha/5-beta-steroid reductases to convert steroid hormones into the 3-alpha/5-alpha and 3-alpha/5-beta-tetrahydrosteroids. Catalyzes the inactivation of the most potent androgen 5-alpha-dihydrotestosterone (5-alpha-DHT) to 5-alpha-androstane-3-alpha,17-beta-diol (3-alpha-diol). Has a high bile-binding ability.,similarity:Belongs to the aldo/keto reductase family.,

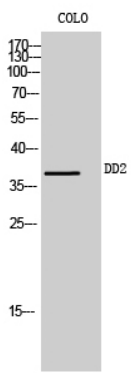
Research Area

Steroid hormone biosynthesis;Metabolism of xenobiotics by cytochrome P450;

Image Data



Western blot analysis of lysates from COLO cells, using AKR1C2 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of COLO cells using DD2 Polyclonal Antibody