

Product Name: DD2 Rabbit Polyclonal Antibody
Catalog #: APRab09857



Summary

Production Name	DD2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	AKR1C2 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
Alternative Names	
Gene ID	1646.0
SwissProt ID	P52895.The antiserum was produced against synthesized peptide derived from human AKR1C2. AA range:21-70

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000
Molecular Weight	37kD

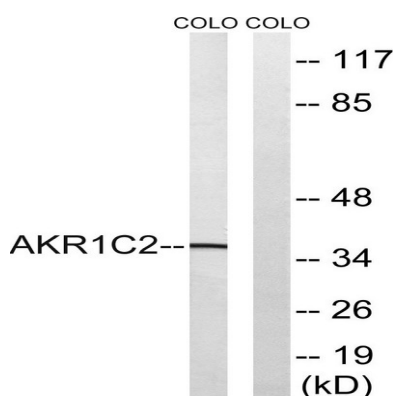
Background

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- α -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- α -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 μ M, 1,10-phenanthroline with an IC(50) of 2100 μ M, 1,7-phenanthroline with an IC(50) of 1500 μ M, flufenamic acid with an IC(50) of 0.9 μ M, indomethacin with an IC(50) of 75 μ M, ibuprofen with an IC(50) of 6.9 μ M, lithocholic acid with an IC(50) of 0.07 μ M, ursodeoxycholic acid with an IC(50) of 0.08 μ M and chenodeoxycholic acid with an IC(50) of 0.13 μ M, function: Works in concert with the 5- α /5- β -steroid reductases to convert steroid hormones into the 3- α /5- α and 3- α /5- β -tetrahydrosteroids. Catalyzes the inactivation of the most potent androgen 5- α -dihydrotestosterone (5- α -DHT) to 5- α -androstane-3- α ,17- β -diol (3- α -diol). Has a high bile-binding ability, similarity: Belongs to the aldo/keto reductase family,

Research Area

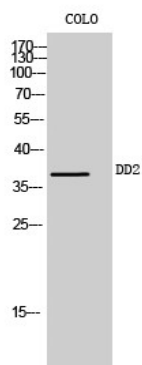
Steroid hormone biosynthesis; Metabolism of xenobiotics by cytochrome P450;

Image Data



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

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Western Blot analysis of COLO cells using DD2 Polyclonal Antibody

Note

For research use only.