



# DD2 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02611
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	AKR1C2
<b>Protein Name</b>	Aldo-keto reductase family 1 member C2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human AKR1C2. AA range:21-70
<b>Specificity</b>	DD2 Polyclonal Antibody detects endogenous levels of DD2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	37kD
<b>Cell Pathway</b>	Cytoplasm, cytosol .
<b>Tissue Specificity</b>	Expressed in fetal testes. Expressed in fetal and adult adrenal glands.
<b>Function</b>	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-

**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],

**matters needing attention**

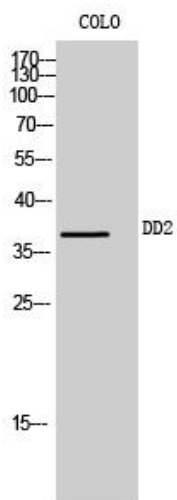
Avoid repeated freezing and thawing!

**Usage suggestions**

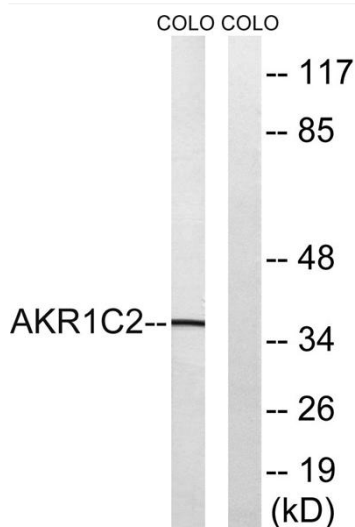
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



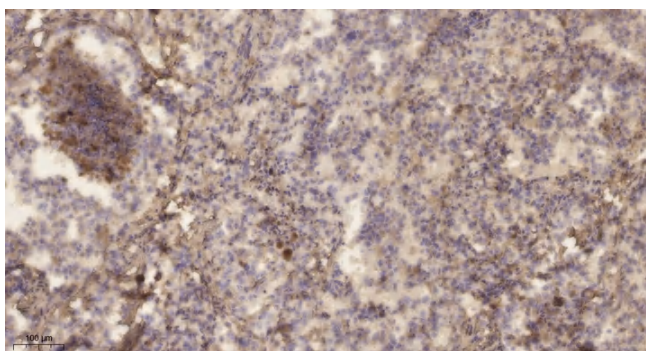
## Products Images



Western Blot analysis of COLO cells using DD2 Polyclonal Antibody



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



Immunohistochemical analysis of paraffin-embedded human lung cancer. 1, Antibody was diluted at 1:200(4<sup>o</sup> overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).