10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DD2 Polyclonal Antibody
Catalog # AP69488

Specification

DD2 Polyclonal Antibody - Product Information

Application	**WB**
Primary Accession	P52895
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**

DD2 Polyclonal Antibody - Additional Information

Gene ID 1646

Other 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

Dilution
WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

DD2 Polyclonal Antibody - Protein Information

Name AKR1C2

Synonyms DDH2

Function
Cytosolic aldo-keto reductase that catalyzes the NADH and NADPH-dependent reduction of ketosteroids to hydroxysteroids (PubMed:19218247). Most probably acts as a reductase in vivo since the oxidase activity measured in vitro is inhibited by physiological concentrations of NADPH (PubMed:14672942). Displays a broad positional specificity acting on positions 3, 17 and 20 of steroids and regulates the metabolism of hormones like estrogens and androgens (PubMed:10998348). 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) (PubMed:15929998, PubMed:17034817, PubMed:17442338, PubMed:8573067). Also specifically able to produce 17beta-hydroxy-5alpha-androstan-3-one/5alphaDHT (PubMed:10998348). May also reduce conjugated steroids such as 5alpha- dihydrotestosterone sulfate (PubMed:19218247). Displays affinity for bile acids (PubMed:8486699).

Cellular Location
Cytoplasm, cytosol.

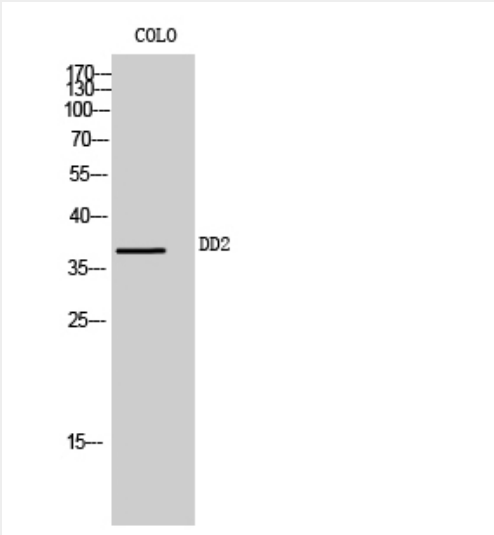
Tissue Location
Expressed in fetal testes. Expressed in fetal and adult adrenal glands.

DD2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DD2 Polyclonal Antibody - Images



DD2 Polyclonal Antibody - Background

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.