

产品名称: DD3 Rabbit Polyclonal Antibody  
产品货号: APRab09858



## 产品概述 (Summary)

|                        |                                |
|------------------------|--------------------------------|
| 产品名称 (Production Name) | DD3 Rabbit Polyclonal Antibody |
| 描述 (Description)       | Rabbit polyclonal Antibody     |
| 宿主 (Host)              | Rabbit                         |
| 应用 (Application)       | WB,ELISA                       |
| 种属反应性 (Reactivity)     | Human,Rat,Mouse                |

## 产品性能 (Performance)

|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| 偶联物 (Conjugation)   | Unconjugated                                                                                      |
| 修饰 (Modification)   | Unmodified                                                                                        |
| 同种型 (Isotype)       | IgG                                                                                               |
| 克隆 (Clonality)      | Polyclonal                                                                                        |
| 形式 (Form)           | Liquid                                                                                            |
| 存放说明 (Storage)      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.          |
| 储存溶液 (Buffer)       | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| 纯化方式 (Purification) | Affinity purification                                                                             |

## 免疫原信息 (Immunogen)

|                        |                                                                                                                                                                                                                                                            |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 基因名 (Gene Name)        | AKR1C3<br>AKR1C3; DDH1; HSD17B5; KIAA0119; PGFS; Aldo-keto reductase family 1 member C3; 17-beta-hydroxysteroid dehydrogenase type 5; 17-beta-HSD 5; 3-alpha-HSD type II; brain; 3-alpha-hydroxysteroid dehydrogenase type 2; 3-alpha-HSD type 2; Chlordec |
| 别名 (Alternative Names) |                                                                                                                                                                                                                                                            |
| 基因 ID (Gene ID)        | 8644.0                                                                                                                                                                                                                                                     |
| 蛋白 ID (SwissProt ID)   | P42330.The antiserum was produced against synthesized peptide derived from human AKR1C3. AA range:191-240                                                                                                                                                  |

## 产品应用 (Application)

|                      |                                       |
|----------------------|---------------------------------------|
| 稀释比 (Dilution Ratio) | WB 1:500-1:2000,ELISA 1:10000-1:20000 |
|----------------------|---------------------------------------|

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**蛋白分子量 (Molecular Weight)**     37kDa

## 研究背景 (Background)

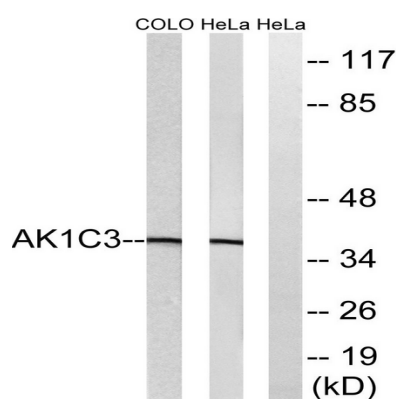
This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D<sub>2</sub>, PGH<sub>2</sub> and phenanthrenequinone (PQ), and the oxidation of 9 $\alpha$ ,11 $\beta$ -PGF<sub>2</sub> to PGD<sub>2</sub>. It may play an important role in the pathogenesis of allergic diseases such as asthma, and may also have a role in controlling cell growth and/or differentiation. 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 different isoforms have been found for this gene. [provided by RefSeq, Dec 2011],catalytic activity:(5Z,13E)-(15S)-9- $\alpha$ ,11- $\alpha$ ,15-trihydroxyprosta-5,13-dienoate + NADP(+) = (5Z,13E)-(15S)-9- $\alpha$ ,15-dihydroxy-11-oxoprosta-5,13-dienoate + NADPH.,catalytic activity:Androsterone + NAD(P)(+) = 5- $\alpha$ -androstane-3,17-dione + NAD(P)H.,catalytic activity:Indan-1-ol + NAD(P)(+) = indanone + NAD(P)H.,catalytic activity:Testosterone + NAD(+) = androst-4-ene-3,17-dione + NADH.,catalytic activity:Testosterone + NADP(+) = androst-4-ene-3,17-dione + NADPH.,catalytic activity:Trans-1,2-dihydrobenzene-1,2-diol + NADP(+) = catechol + NADPH.,enzyme regulation:Strongly inhibited by nonsteroidal anti-inflammatory drugs (NSAID) including flufenamic acid and indomethacin. Also inhibited by the flavinoid, rutin, and by selective serotonin inhibitors (SSRIs).,function:Catalyzes the conversion of aldehydes and ketones to alcohols. Catalyzes the reduction of prostaglandin (PG) D<sub>2</sub>, PGH<sub>2</sub> and phenanthrenequinone (PQ) and the oxidation of 9- $\alpha$ ,11- $\beta$ -PGF<sub>2</sub> to PGD<sub>2</sub>. Functions as a bi-directional 3- $\alpha$ -, 17- $\beta$ - and 20- $\alpha$  HSD. Can interconvert active androgens, estrogens and progestins with their cognate inactive metabolites. Preferentially transforms androstenedione (4-dione) to testosterone.,similarity:Belongs to the aldo/keto reductase family.,tissue specificity:Expressed in many tissues including adrenal gland, brain, kidney, liver, lung, mammary gland, placenta, small intestine, colon, spleen, prostate and testis. The dominant HSD in prostate and mammary gland. In the prostate, higher levels in epithelial cells than in stromal cells. In the brain, expressed in medulla, spinal cord, frontotemporal lobes, thalamus, subthalamic nuclei and amygdala. Weaker expression in the hippocampus, substantia nigra and caudate.,

## 研究领域 (Research Area)

Steroid hormone biosynthesis;Arachidonic acid metabolism;Metabolism of xenobiotics by cytochrome P450;

## 图片 (Image Data)

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Western blot analysis of lysates from HeLa and COLO cells, using AKR1C3 Antibody. The lane on the right is blocked with the synthesized peptide.

#### 注意事项 (Note)

For research use only .