



DD3 Monoclonal Antibody

Catalog No	YP-mAb-02612
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	AKR1C3
Immunogen	The antiserum was produced against synthesized peptide derived from human AKR1C3. AA range:191-240
Specificity	DD3 Monoclonal Antibody detects endogenous levels of DD3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	17-beta-HSD 5;17-beta-hydroxysteroid dehydrogenase type 5;3-alpha-HSD type 2;3-alpha-HSD type II;brain;3-alpha-hydroxysteroid dehydrogenase type 2;DD3; AKR1C3;Aldo-keto reductase family 1 member C3;DDH1;HSD17B5;KIAA0119; PGFS;Chlordec
Observed Band	37kD
Calculated Molecular Weight	37kD
Cell Pathway	Cytoplasm .
Tissue Specificity	Expressed in many tissues including adrenal gland, brain, kidney, liver, lung, mammary gland, placenta, small intestine, colon, spleen, prostate and testis. High expression 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.
Function	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) D2, PGH2

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) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. 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],

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 various cells using DD3 Monoclonal Antibody