

Anti-DHRS4 Antibody

Rabbit polyclonal antibody to DHRS4 Catalog # AP60665

Specification

Anti-DHRS4 Antibody - Product Information

Application WB, IHC Primary Accession Q9BTZ2

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 29537

Anti-DHRS4 Antibody - Additional Information

Gene ID 10901

Other Names

Dehydrogenase/reductase SDR family member 4; NADPH-dependent carbonyl reductase/NADP-retinol dehydrogenase; CR; PHCR; NADPH-dependent retinol dehydrogenase/reductase; NRDR; humNRDR; Peroxisomal short-chain alcohol dehydrogenase; PSCD; SCAD-SRL; Short-chain dehydrogenase/reductase family member 4

Target/Specificity

Recognizes endogenous levels of DHRS4 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200) IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-DHRS4 Antibody - Protein Information

Name DHRS4 (HGNC:16985)

Function

NADPH-dependent oxidoreductase which catalyzes the reduction of a variety of compounds bearing carbonyl groups including ketosteroids, alpha-dicarbonyl compounds, aldehydes, aromatic ketones and quinones (PubMed:18571493, PubMed:19056333). Reduces 3-ketosteroids and benzil into 3beta-hydroxysteroids and R-benzoin, respectively, in contrast to the stereoselectivity of non-primate DHRS4s which



produce 3alpha-hydroxysteroids and S-benzoin (PubMed:19056333). Diplays low activity toward all-trans-retinal and no activity toward 9-cis-retinal as compared to non-primate mammals (PubMed:18571493, PubMed:19056333). In the reverse reaction, catalyze the NAD-dependent oxidation of 3beta- hydroxysteroids and alcohol, but with much lower efficiency (PubMed:18571493, PubMed:19056333). Involved in the metabolism of 3beta-hydroxysteroids, isatin and xenobiotic carbonyl compounds (PubMed:18571493, PubMed:18571493, PubMed:18571493, PubMed:19056333

Cellular Location

[Isoform 1]: Peroxisome Note=Isoform 4 is not peroxisomal.

Tissue Location

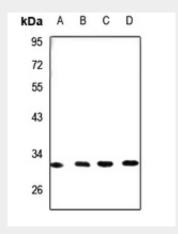
[Isoform 1]: Predominantly expressed in normal cervix (at protein level). [Isoform 5]: Expressed in a few neoplastic cervical tissues. [Isoform 8]: High expression in liver.

Anti-DHRS4 Antibody - Protocols

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

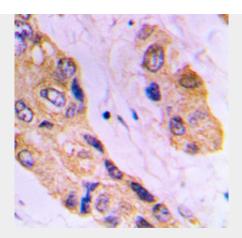
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-DHRS4 Antibody - Images



Western blot analysis of DHRS4 expression in HeLa (A), HCT116 (B), PC12 (C), CT26 (D) whole cell lysates.





Immunohistochemical analysis of DHRS4 staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-DHRS4 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human DHRS4. The exact sequence is proprietary.