

DHRS4 Polyclonal Antibody

Catalog # AP69532

Specification

DHRS4 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	Q9BTZ2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

DHRS4 Polyclonal Antibody - Additional Information

Gene ID 10901

Other Names

DHRS4; 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

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

IHC-P~~N/A

Format

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

Storage Conditions

-20°C

DHRS4 Polyclonal 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](http://www.uniprot.org/citations/18571493), PubMed:[19056333](http://www.uniprot.org/citations/19056333)). Reduces 3-ketosteroids and benzil into 3 β -hydroxysteroids and R-benzoin, respectively, in contrast to the stereoselectivity of non-primate DHRS4s which produce 3 α -hydroxysteroids and S-benzoin (PubMed:[19056333](http://www.uniprot.org/citations/19056333)). Displays low activity toward all-trans-retinal and no activity toward 9-cis-retinal as compared to non-primate mammals (PubMed:[18571493](http://www.uniprot.org/citations/18571493), PubMed:[19056333](http://www.uniprot.org/citations/19056333))

target="_blank">>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:19056333).

Cellular Location

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

Tissue Location

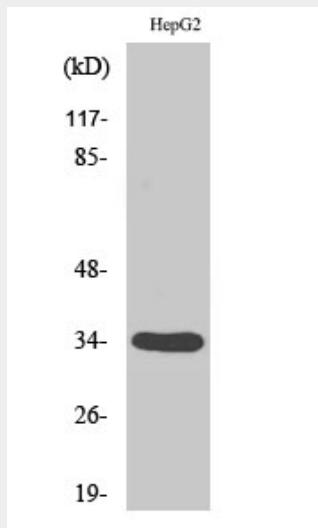
[Isoform 1]: Predominantly expressed in normal cervix (at protein level). [Isoform 5]: Expressed in a few neoplastic cervical tissues. [Isoform 8]: High expression in liver.

DHRS4 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 Cytometry](#)
- [Cell Culture](#)

DHRS4 Polyclonal Antibody - Images



Western Blot analysis of various cells using DHRS4 Polyclonal Antibody diluted at 1:2000



Western Blot analysis of various cells using DHRS4 Polyclonal Antibody diluted at 1:2000

DHRS4 Polyclonal Antibody - Background

Reduces all-trans-retinal and 9-cis retinal. Can also catalyze the oxidation of all-trans-retinol with NADP as co-factor, but with much lower efficiency. Reduces alkyl phenyl ketones and alpha-dicarbonyl compounds with aromatic rings, such as pyrimidine-4-aldehyde, 3-benzoylpyridine, 4-benzoylpyridine, menadione and 4-hexanoylpyridine. Has no activity towards aliphatic aldehydes and ketones (By similarity).