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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℃

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, 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:<a href="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.

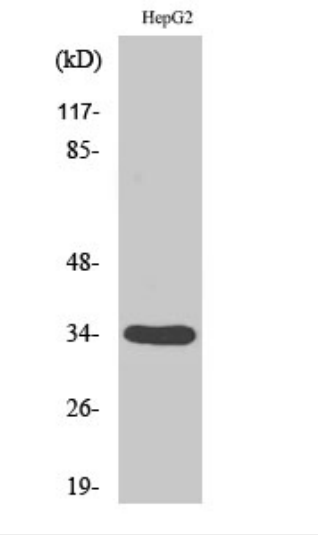
Tissue Location
[Isoform 1]: Predominantly expressed in normal cervix (at protein level). [Isoform 5]: Expressed in a few neoplastic cervical tissues. [Isoform 8]: High expression in liver.

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 Cytomety
- Cell Culture

DHRS4 Polyclonal Antibody - Images



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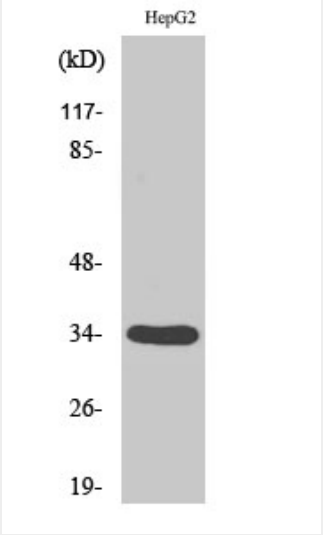

DHRS4 Polyclonal Antibody - Background

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).