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DHRS4 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13614c

Specification

DHRS4 Antibody (Center) Blocking peptide - Product Information

Primary Accession Q9BTZ2

DHRS4 Antibody (Center) Blocking peptide - 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, DHRS4

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13614c was selected from the Center region of DHRS4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DHRS4 Antibody (Center) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/18571493"

target="_blank">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: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 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

DHRS4 Antibody (Center) Blocking peptide - Images

DHRS4 Antibody (Center) Blocking peptide - Background

DHRS4 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).

DHRS4 Antibody (Center) Blocking peptide - References

Su, Z.J., et al. BMC Mol. Biol. 11, 43 (2010) :Persson, B., et al. Chem. Biol. Interact. 178 (1-3), 94-98 (2009) :Zhang, Q., et al. Biosci. Rep. 29(1):47-56(2009)Matsunaga, T., et al. Arch. Biochem. Biophys. 477(2):339-347(2008)Ferreira, M.A., et al. Nat. Genet. 40(9):1056-1058(2008)