

**DHRS4 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12335a****Specification**

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**DHRS4 Antibody (N-term) Blocking peptide - Product Information**Primary Accession [Q9BTZ2](#)**DHRS4 Antibody (N-term) 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

**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 (N-term) 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](http://www.uniprot.org/citations/18571493), PubMed: [19056333](http://www.uniprot.org/citations/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](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)). In the reverse reaction, catalyze the NAD-dependent oxidation of 3beta-hydroxysteroids and alcohol, but with much lower efficiency (PubMed: [18571493](http://www.uniprot.org/citations/18571493), PubMed: [19056333](http://www.uniprot.org/citations/19056333)). Involved in

the metabolism of 3beta-hydroxysteroids, isatin and xenobiotic carbonyl compounds (PubMed:<a href="http://www.uniprot.org/citations/18571493" target="\_blank">18571493</a>, PubMed:<a href="http://www.uniprot.org/citations/19056333" target="\_blank">19056333</a>).

**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 (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**DHRS4 Antibody (N-term) Blocking peptide - Images****DHRS4 Antibody (N-term) 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 (N-term) 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)