Datasheet for ABIN7547056

DHRS4 Protein (AA 1-278) (His tag)

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Overview

Quantity:	1 mg
Target:	DHRS4
Protein Characteristics:	AA 1-278
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DHRS4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant DHRS4 Protein expressed in mammalian cells.
Sequence:	MHKAGLLGLC ARAWNSVRMA SSGMTRRDPL ANKVALVTAS TDGIGFAIAR RLAQDGAHVV VSSRKQQNVD QAVATLQGEG LSVTGTVCHV GKAEDRERLV ATAVKLHGGI DILVSNAAVN PFFGSIMDVT EEVWDKTLDI NVKAPALMTK AVVPEMEKRG GGSVVIVSSI AAFSPSPGFS PYNVSKTALL GLTKTLAIEL APRNIRVNCL APGLIKTSFS RMLWMDKEKE ESMKETLRIR RLGEPEDCAG IVSFLCSEDA SYITGETVVV GGGTPSRL **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	DHRS4
Alternative Name:	DHRS4 (DHRS4 Products)
Background:	Dehydrogenase/reductase SDR family member 4 (EC 1.1.1.184) (NADPH-dependent carbonyl reductase) (CR) (NADPH-dependent retinol dehydrogenase/reductase) (NRDR) (humNRDR) (Peroxisomal short-chain alcohol dehydrogenase) (PSCD) (SCAD-SRL) (Short chain dehydrogenase/reductase family 25C member 2) (Protein SDR25C2) (Short-chain dehydrogenase/reductase family member 4),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-

Target Details

	hydroxysteroids, isatin and xenobiotic carbonyl compounds (PubMed:18571493, PubMed:19056333). {ECO:0000269|PubMed:18571493, ECO:0000269|PubMed:19056333}., FUNCTION: [Isoform 7]: No detected catalytic activity in vitro, possibly due to the lack of catalytic site. {ECO:0000269|PubMed:22227495}., FUNCTION: [Isoform 8]: 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. Involved in the metabolism of 3beta-hydroxysteroids, isatin and xenobiotic carbonyl compounds. Has a higher catalytic activity for xenobiotic alpha-dicarbonyl compounds, sucha as benzil, than isoform 1 and is involved in benzil detoxification. {ECO:0000269|PubMed:23128527}.
Molecular Weight:	29.5 kDa
UniProt:	Q9BTZ2

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months