Datasheet for ABIN7553530

CYP26B1 Protein (AA 1-512) (His tag)

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Overview

Quantity:	1 mg
Target:	CYP26B1
Protein Characteristics:	AA 1-512
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP26B1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYP26B1 Protein expressed in mammalian cells.
Sequence:	MLFEGLDLVS ALATLAACLV SVTLLLAVSQ QLWQLRWAAT RDKSCKLPIP KGSMGFPLIG ETGHWLLQGS GFQSSRREKY GNVFKTHLLG RPLIRVTGAE NVRKILMGEH HLVSTEWPRS TRMLLGPNTV SNSIGDIHRN KRKVFSKIFS HEALESYLPK IQLVIQDTLR AWSSHPEAIN VYQEAQKLTF RMAIRVLLGF SIPEEDLGHL FEVYQQFVDN VFSLPVDLPF SGYRRGIQAR QILQKGLEKA IREKLQCTQG KDYLDALDLL IESSKEHGKE MTMQELKDGT LELIFAAYAT TASASTSLIM QLLKHPTVLE KLRDELRAHG ILHSGGCPCE GTLRLDTLSG LRYLDCVIKE VMRLFTPISG GYRTVLQTFE LDGFQIPKGW SVMYSIRDTH DTAPVFKDVN VFDPDRFSQA RSEDKDGRFH YLPFGGGVRT CLGKHLAKLF LKVLAVELAS TSRFELATRT FPRITLVPVL HPVDGLSVKF FGLDSNQNEI LPETEAMLSA TV **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.**

Product Details

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: • 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:	CYP26B1
Alternative Name:	CYP26B1 (CYP26B1 Products)
Background:	Cytochrome P450 26B1 (EC 1.14.13.-) (Cytochrome P450 26A2) (Cytochrome P450 retinoic acid-inactivating 2) (Cytochrome P450RAI-2) (Retinoic acid-metabolizing cytochrome),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of retinoates (RAs), the active metabolites of vitamin A, and critical signaling molecules in animals (PubMed:10823918, PubMed:22020119). RAs exist as at least four different isomers: all-trans-RA (atRA), 9-cis-RA, 13-cis-RA, and 9,13-dicis-RA, where atRA is considered to be the biologically active isomer, although 9-cis-RA and 13-cis-RA also have activity (Probable). Catalyzes the hydroxylation of atRA primarily at C-4 and C-18, thereby contributing to the regulation of atRA homeostasis and signaling (PubMed:10823918). Hydroxylation of atRA limits its biological activity and initiates a degradative process leading to its eventual elimination (PubMed:10823918, PubMed:22020119). Involved in the convertion of atRA to all-trans-4-oxo-

Target Details

	RA. Can oxidize all-trans-13,14-dihydroretinoate (DRA) to metabolites which could include all-trans-4-oxo-DRA, all-trans-4-hydroxy-DRA, all-trans-5,8-epoxy-DRA, and all-trans-18-hydroxy-DRA (By similarity). Shows preference for the following substrates: atRA > 9-cis-RA > 13-cis-RA (PubMed:10823918, PubMed:22020119). Plays a central role in germ cell development: acts by degrading RAs in the developing testis, preventing STRA8 expression, thereby leading to delay of meiosis. Required for the maintenance of the undifferentiated state of male germ cells during embryonic development in Sertoli cells, inducing arrest in G0 phase of the cell cycle and preventing meiotic entry. Plays a role in skeletal development, both at the level of patterning and in the ossification of bone and the establishment of some synovial joints (PubMed:22019272). Essential for postnatal survival (By similarity). {ECO:0000250|UniProtKB:Q811W2, ECO:0000269|PubMed:10823918, ECO:0000269|PubMed:22019272, ECO:0000269|PubMed:22020119, ECO:0000305|PubMed:22020119}., FUNCTION: Has also a significant activity in oxidation of tazarotenic acid and may therefore metabolize that xenobiotic in vivo. {ECO:0000269|PubMed:26937021}.
Molecular Weight:	57.5 kDa
UniProt:	Q9NR63
Pathways:	Retinoic Acid Receptor Signaling Pathway, Regulation of Muscle Cell Differentiation, Monocarboxylic Acid Catabolic Process

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