Datasheet for ABIN7562718

CYP1A1 Protein (AA 1-524) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	CYP1A1
Protein Characteristics:	AA 1-524
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP1A1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Cyp1a1 Protein expressed in mammalian cells.
Sequence:	MPSMYGLPAF VSATELLLAV TVFCLGFWVV RATRTWVPKG LKTPPGPWGL PFIGHMLTVG KNPHLSLTRL SQQYGDVLQI RIGSTPVVVL SGLNTIKQAL VRQGDDFKGR PDLYSFTLIT NGKSMTFNPD SGPVWAARRR LAQNALKSFS IASDPTSASS CYLEEHVSKE ANYLVSKLQK VMAEVGHFDP YKYLVVSVAN VICAICFGQR YDHDDQELLS IVNLSNEFGE VTGSGYPADF IPVLRYLPNS SLDAFKDLND KFYSFMKKLI KEHYRTFEKG HIRDITDSLI EHCQDRKLDE NANVQLSDDK VITIVLDLFG AGFDTVTTAI SWSLMYLVTN PRVQRKIQEE LDTVIGRDRQ PRLSDRPQLP YLEAFILETF RHSSFVPFTI PHSTTRDTSL NGFYIPKGCC VFVNQWQVNH DRELWGDPNE FRPERFLTPS GTLDKRLSEK VTLFGLGKRK CIGETIGRSE VFLFLAILLQ QIEFKVSPGE KVDMTPTYGL TLKHARCEHF QVQMRSSGPQ HLQA **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:	CYP1A1
Alternative Name:	Cyp1a1 (CYP1A1 Products)
Background:	Cytochrome P450 1A1 (EC 1.14.14.1) (CYPIA1) (Cytochrome P450 form 6) (Cytochrome P450-C) (Cytochrome P450-P1) (Hydroperoxy icosatetraenoate dehydratase) (EC 4.2.1.152),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins. Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR, NADPH-ferrihemoprotein reductase). Catalyzes the hydroxylation of carbon-hydrogen bonds. Exhibits high catalytic activity for the formation of hydroxyestrogens from estrone (E1) and 17beta-estradiol (E2), namely 2-hydroxy E1 and E2, as well as D-ring hydroxylated E1 and E2 at the C15alpha and C16alpha positions. Displays different regioselectivities for polyunsaturated fatty acids (PUFA) hydroxylation. Catalyzes the

Target Details

	epoxidation of double bonds of certain PUFA. Converts arachidonic acid toward epoxyeicosatrienoic acid (EET) regioisomers, 8,9-, 11,12-, and 14,15-EET, that function as lipid mediators in the vascular system. Displays an absolute stereoselectivity in the epoxidation of eicosapentaenoic acid (EPA) producing the 17(R),18(S) enantiomer. May play an important role in all-trans retinoic acid biosynthesis in extrahepatic tissues. Catalyzes two successive oxidative transformation of all-trans retinol to all-trans retinal and then to the active form all-trans retinoic acid. May also participate in eicosanoids metabolism by converting hydroperoxide species into oxo metabolites (lipoxygenase-like reaction, NADPH-independent). {ECO:0000250|UniProtKB:P04798}.
Molecular Weight:	59.2 kDa
UniProt:	P00184
Pathways:	Steroid Hormone Biosynthesis, Regulation of Lipid Metabolism by PPARalpha

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