Datasheet for ABIN7546734

CYP2J2 Protein (AA 1-502) (His tag)

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Overview

Quantity:	1 mg
Target:	CYP2J2
Protein Characteristics:	AA 1-502
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP2J2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYP2J2 Protein expressed in mammalian cells.
Sequence:	MLAAMGSLAA ALWAVVHPRT LLLGTVAFLL AADFLKRRRP KNYPPGPWRL PFLGNFFLVD FEQSHLEVQL FVKKYGNLFS LELGDISAVL ITGLPLIKEA LIHMDQNFGN RPVTPMREHI FKKNGLIMSS GQAWKEQRRF TLTALRNFGL GKKSLEERIQ EEAQHLTEAI KEENGQPFDP HFKINNAVSN IICSITFGER FEYQDSWFQQ LLKLLDEVTY LEASKTCQLY NVFPWIMKFL PGPHQTLFSN WKKLKLFVSH MIDKHRKDWN PAETRDFIDA YLKEMSKHTG NPTSSFHEEN LICSTLDLFF AGTETTSTTL RWALLYMALY PEIQEKVQAE IDRVIGQGQQ PSTAARESMP YTNAVIHEVQ RMGNIIPLNV PREVTVDTTL AGYHLPKGTM ILTNLTALHR DPTEWATPDT FNPDHFLENG QFKKREAFMP FSIGKRACLG EQLARTELFI FFTSLMQKFT FRPPNNEKLS LKFRMGITIS PVSHRLCAVP QV **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

Product Details

	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:	CYP2J2
Alternative Name:	CYP2J2 (CYP2J2 Products)
Background:	Cytochrome P450 2J2 (EC 1.14.14.-) (Albendazole monooxygenase (hydroxylating)) (EC 1.14.14.74) (Albendazole monooxygenase (sulfoxide-forming)) (EC 1.14.14.73) (Arachidonic acid epoxygenase) (CYPIIJ2) (Hydroperoxy icosatetraenoate isomerase) (EC 5.4.4.7),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of polyunsaturated fatty acids (PUFA) in the cardiovascular system (PubMed:8631948, PubMed:19965576). 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 (NADPH--hemoprotein reductase) (PubMed:8631948, PubMed:19965576). Catalyzes the epoxidation of double bonds of PUFA (PubMed:8631948, PubMed:19965576). Converts arachidonic acid to four regioisomeric epoxyeicosatrienoic acids (EpETrE), likely playing a major role in the epoxidation of endogenous cardiac arachidonic acid pools (PubMed:8631948). In endothelial cells, participates in eicosanoids metabolism by

Target Details

	converting hydroperoxide species into hydroxy epoxy metabolites. In combination with 15-lipoxygenase metabolizes arachidonic acid and converts hydroperoxyicosatetraenoates (HpETEs) into hydroxy epoxy eicosatrienoates (HEETs), which are precursors of vasodilatory trihydroxyicosatrienoic acids (THETAs). This hydroperoxide isomerase activity is NADPH- and O2-independent (PubMed:19737933). Catalyzes the monooxygenation of a various xenobiotics, such as danazol, amiodarone, terfenadine, astemizole, thioridazine, tamoxifen, cyclosporin A and nabumetone (PubMed:19923256). Catalyzes hydroxylation of the anthelmintics albendazole and fenbendazole (PubMed:23959307). Catalyzes the sulfoxidation of fenbedazole (PubMed:19923256). {ECO:0000269|PubMed:19737933, ECO:0000269|PubMed:19923256, ECO:0000269|PubMed:19965576, ECO:0000269|PubMed:23959307, ECO:0000269|PubMed:8631948}.
Molecular Weight:	57.6 kDa
UniProt:	P51589

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