

Datasheet for ABIN7546737
CYP4Z1 Protein (AA 1-505) (His tag)



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Overview

Quantity:	1 mg
Target:	CYP4Z1
Protein Characteristics:	AA 1-505
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP4Z1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYP4Z1 Protein expressed in mammalian cells.
Sequence:	MEPSWLQELM AHPFLLLILL CMSLLLQVI RLYQRRRWMI RALHLFPAPP AHWFYGHKEF YPVKEFVYH KLMEKYPHAV PLWVGPFMTF FSVHDPDYAK ILLKRQDPKS AVSHKILESW VGRGLVTLDG SKWKKHRQIV KPGFNISILK IFITMMSESV RMMLNKWEEH IAQNSRLELF QHVSLMTLDS IMKCAFESHQG SIQLDSTLDS YLKAVFNLSK ISNQRMNFL HHNDLVFKFS SQGQIFSKFN QELHQFTEKV IQDRKESLKD KLKQDQTQKR RWDFLDILLS AKSENTKDFS EADLQAEVKT FMFAGHDSTS SAISWILYCL AKYPEHQRC RDEIRELLGD GSSITWEHLS QMPYTTMCIK ECLRLYAPVV NISRLLDKPI TFPDGRSLPA GITVFINIWA LHHNPYFWED PQVFNPLRFS RENSEKIHPY AFIPFSAGLR NCIGQHFAI ECKVAVALTL LRFKLPDHS RPPQPVRQVV LKSKNGIHVF AKKVC 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:

CYP4Z1

Alternative Name:

CYP4Z1 ([CYP4Z1 Products](#))

Background:

Cytochrome P450 4Z1 (EC 1.14.14.1) (CYP4Z1) (Laurate 7-monoxygenase) (EC 1.14.14.130),FUNCTION: A cytochrome P450 monoxygenase that catalyzes the in-chain oxidation of fatty acids (PubMed:19090726, PubMed:29018033). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates lauric and myristic acids predominantly at the omega-4 and omega-2 positions, respectively (PubMed:19090726, PubMed:29018033). Catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA). Displays an absolute stereoselectivity in the epoxidation of arachidonic acid producing the 14(S),15(R)-epoxyicosatrienoic acid (EET) enantiomer (PubMed:29018033). 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) (PubMed:19090726, PubMed:29018033). {ECO:0000269|PubMed:19090726, ECO:0000269|PubMed:29018033}.

Target Details

Molecular Weight: 59.1 kDa

UniProt: [Q86W10](#)

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