

Datasheet for ABIN7546716
CYP3A5 Protein (AA 1-502) (His tag)



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Overview

Quantity:	1 mg
Target:	CYP3A5
Protein Characteristics:	AA 1-502
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP3A5 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYP3A5 Protein expressed in mammalian cells.
Sequence:	MDLIPNLAVE TWLLAVSLV LLYLYGTRTH GLFKRLGIPG PTPLPLGNV LSYRQGLWKF DTECYKKYGK MWGTYEGQLP VLAITDPDVI RTVLVKECYS VFTNRRSLGP VGFMKSAISL AEDEEWKRIR SLLSPTFTSG KLKEMFPIA QYGDVLRNL RREAEGKGPV TLKDIFGAYS MDVITGTSFG VNIDSLNNPQ DPFVESTKKF LKFGFLDPLF LSII LFPFLT PVFEALNVSL FPKDTINFLS KSVNRMKKS R LNDKQKHRLD FLQLMIDSQN SKETESHKAL SDLELAAQSI IFIFAGYETT SSVLSFTLYE LATHPDVQQK LQKEIDAVLP NKAPPTYDAV VQMEYLDMMV NETLRLFPVA IRLERTCKKD VEINGVFIPK GSMVVIPTYA LHHDPKYWTE PEEFRPERFS KKKDSIDPYI YTPFGTGPRN CIGMRFALMN MKLALIRVLQ NFSFKPKCKET QIPLKLDTQG LLQPEKPIVL KVDSRDG TLS GE 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:

CYP3A5

Alternative Name:

CYP3A5 ([CYP3A5 Products](#))

Background:

Cytochrome P450 3A5 (EC 1.14.14.1) (CYP11A5) (Cytochrome P450-PCN3),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of steroid hormones and vitamins (PubMed:2732228, PubMed:10681376, PubMed:11093772, PubMed:12865317). 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). Catalyzes the hydroxylation of carbon-hydrogen bonds (PubMed:12865317, PubMed:2732228, PubMed:10681376, PubMed:11093772). Exhibits high catalytic activity for the formation of catechol estrogens from 17beta-estradiol (E2) and estrone (E1), namely 2-hydroxy E1 and E2 (PubMed:12865317). Catalyzes 6beta-hydroxylation of the steroid hormones testosterone, progesterone, and androstenedione (PubMed:2732228). Catalyzes the oxidative conversion of all-trans-retinol to all-trans-retinal, a rate-limiting step for the biosynthesis of all-trans-retinoic acid (atRA)

Target Details

(PubMed:10681376). Further metabolizes all trans-retinoic acid (atRA) to 4-hydroxyretinoate and may play a role in hepatic atRA clearance (PubMed:11093772). Also involved in the oxidative metabolism of xenobiotics, including calcium channel blocking drug nifedipine and immunosuppressive drug cyclosporine (PubMed:2732228). {ECO:0000269|PubMed:10681376, ECO:0000269|PubMed:11093772, ECO:0000269|PubMed:12865317, ECO:0000269|PubMed:2732228}.

Molecular Weight: 57.1 kDa

UniProt: [P20815](#)

Pathways: [Steroid Hormone Biosynthesis](#)

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