

Datasheet for ABIN7546791

## CYP3A7 Protein (AA 1-503) (His tag)



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	CYP3A7
Protein Characteristics:	AA 1-503
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP3A7 protein is labelled with His tag.

### Product Details

Purpose:	Custom-made recombinant CYP3A7 Protein expressed in mammalian cells.
Sequence:	<p>MDLIPNLAVE TWLLAVSLI LLYLYGTRTH GLFKKLGIPG PTPLPFLGNA LSFRKGYWTF</p> <p>DMECYKKYRK VWGIYDCQP MLAITDPDMI KTVLVKECYS VFTNRRPFGP VGFMKNAISI</p> <p>AEDEEWKRIR SLLSPTFTSG KLKEMVPIIA QYGDVLRNL RREAETGKPV TLKHVFGAYS</p> <p>MDVITSTSFG VSIDSLNNPQ DPFVENTKKL LRFNPLDPFV LSIKVPFLT PILEALNITV</p> <p>FPRKVISFLT KSVKQIKEGR LKETQKHRVD FLQLMIDSQN SKDSETHKAL SDLELMAQSI</p> <p>IFIFAGYETT SSVLSFIIYE LATHPDVQQK VQKEIDTVLP NKAPPTYDTV LQLEYLDMVV</p> <p>NETLRLFPVA MRLERVCKKD VEINGMFIPK GVVVMIPSYV LHHDPKYWTE PEKFLPERFS</p> <p>KKNKDNIDPY IYTPFGSGPR NCIGMRFALV NMKLALVRVL QNFSFKPCKE TQIPLKLRFG</p> <p>GLLLTEKPIV LKAESRDETV SGA <b>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.</b></p>
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:

CYP3A7

### Alternative Name:

CYP3A7 ([CYP3A7 Products](#))

### Background:

Cytochrome P450 3A7 (EC 1.14.14.1) (CYP3A7) (Cytochrome P450-HFLA) (P450HLP2), FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of steroid hormones and vitamins during embryogenesis (PubMed:9555064, PubMed:11093772, PubMed:14559847, PubMed:12865317, PubMed:17178770). 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:9555064, PubMed:11093772, PubMed:14559847, PubMed:12865317, PubMed:17178770). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes 3beta-hydroxyandrost-5-en-17-one (dehydroepiandrosterone, DHEA), a precursor in the biosynthesis of androgen and estrogen steroid hormones (PubMed:9555064, PubMed:17178770). Exhibits high catalytic activity for the formation of hydroxyestrogens from estrone (E1), particularly D-ring hydroxylated estrone at the C16-alpha position

## Target Details

(PubMed:14559847, PubMed:12865317). Mainly hydroxylates all trans-retinoic acid (atRA) to 4-hydroxyretinoate and may play a role in atRA clearance during fetal development (PubMed:11093772). Also involved in the oxidative metabolism of xenobiotics including anticonvulsants (PubMed:9555064). {ECO:0000269|PubMed:11093772, ECO:0000269|PubMed:12865317, ECO:0000269|PubMed:14559847, ECO:0000269|PubMed:17178770, ECO:0000269|PubMed:9555064}.

Molecular Weight: 57.5 kDa

UniProt: [P24462](#)

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