

Datasheet for ABIN7546715  
**CYP2U1 Protein (AA 1-544) (His tag)**



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## Overview

Quantity:	1 mg
Target:	CYP2U1
Protein Characteristics:	AA 1-544
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP2U1 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant CYP2U1 Protein expressed in mammalian cells.
Sequence:	<p>MSSPGPSQPP AEDPPWPARL LRAPLGLLRL DPSGGALLLC GLVALLGWSW LRRRRRARGIP PGPTPWPLVG NFGHVLLPPF LRRRSWLSSR TRAAGIDPSV IGPQVLLAHL ARVYGSIFSF FIGHYLVWL SDFHSVREAL VQQAIEVFSR PRVPLISIVT KEKGVVFAHY GPVWRQQRKF SHSTLRHFGL GKLSLEPKII EEFKYVKAEM QKHGEDPFCE FSIIISNAVSN IICSLCFGQR FDYTNSEFKK MLGFMSRGL ICLNSQVLLV NICPWLYYLP FGPFKELRQI EKDITSFLKK IIKDHQESLD RENPQDFIDM YLLHMEEERK NNSNSSFDEE YLFYIIGDLF IAGTDTTNS LLWCLLYMSL NPDVQEKVHE EIERVIGANR APSLTDKAQM PYTEATIMEV QRLTVVWPLA IPHMTSENTV LQGYTIPKGT LILPNLWSVH RDPAIWEKPE DFYPNRFLLD QGQLIKKETF IPFGIGKRVG MGEQLAKMEL FLMFVSLMQS FAFALPEDSK KPLLTGRFGL TLAPHPFNIT ISRR</p> <p><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>

## Product Details

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**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.

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**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.

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**Purity:** > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

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**Grade:** custom-made

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## Target Details

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**Target:** CYP2U1

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**Alternative Name:** CYP2U1 ([CYP2U1 Products](#))

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**Background:** Cytochrome P450 2U1 (Long-chain fatty acid omega-monooxygenase) (EC 1.14.14.80),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of arachidonic acid and its conjugates (PubMed:14660610, PubMed:24563460). 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:14660610, PubMed:24563460). Acts as an omega and omega-1 hydroxylase for arachidonic acid and possibly for other long chain fatty acids. May modulate the arachidonic acid signaling pathway and play a role in other fatty acid signaling processes (PubMed:14660610, PubMed:24563460). May down-regulate the biological activities of N-arachidonoyl-serotonin, an endocannabinoid that has anti-nociceptive effects through inhibition of fatty acid amide hydrolase FAAH, TRPV1 receptor and T-type calcium

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## Target Details

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channels. Catalyzes C-2 oxidation of the indole ring of N-arachidonoyl-serotonin forming a less active product 2-oxo-N-arachidonoyl-serotonin (PubMed:24563460).  
{ECO:0000269|PubMed:14660610, ECO:0000269|PubMed:24563460}.

Molecular Weight: 62.0 kDa

UniProt: [Q7Z449](#)

## Application Details

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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

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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