

[Go to Product page](#)

Datasheet for ABIN7553537  
**CYP4V2 Protein (AA 1-525) (His tag)**

## Overview

|                               |   |
|-------------------------------|---|
| Quantity:                     | 1 mg  |
| Target:                       | CYP4V2  |
| Protein Characteristics:      | AA 1-525                                      |
| Origin:                       | Human   |
| Source:                       | HEK-293 Cells                                 |
| Protein Type:                 | Recombinant                                   |
| Purification tag / Conjugate: | This CYP4V2 protein is labelled with His tag. |

## Product Details

|           |  |
|-----------|--|
| Purpose:  | Custom-made recombinant CYP4V2 Protein expressed in mammalian cells.   |
| Sequence: | MAGLWLGLVW QKLLLWGAAS ALSLAGASLV LSLLRVASY ARKWQQMRPI PTVARAYPLV<br>GHALLMKPDG REFFQIIEY TEEYRHMP LL KLWVGPMV ALYNAENVEV ILTSSKQIDK<br>SSMYKFLEPW LGLLLTSTG NKWRSRRKML TPTFHFTILE DFLDIMNEQA NILVKKLEKH<br>INQEAFNCFY YITLCALDII CETAMGKNIG AQSNDSEYV RAVYRMSEMI FRIKMPWLW<br>LDLWYLMFKE GWEHKKSLQI LHTFTNSVIA ERANEMNANE DCRGDGRGSA PSKNKRRFL<br>DLLLSVTDDE GNRLSHEDIR EEVDTFMFEG HDTTAAAINW SLYLLGSNPE VQKKVDHELD<br>DVFGKSDRPA TVEDLKKLRY LECVIKETLR LFPSVPLFAR SVSEDCEVAG YRVLKGTEAV<br>IIPYALHRDP RYFPNPEEFQ PERFFPENAQ GRHPYAYVPF SAGPRNCIGQ KFAVMEEKTI<br>LSCILRHFVI ESNQKREELG LEGQLLRPS NGIWIKLRN NADER <b>Sequence without tag. The<br/>proposed Purification-Tag is based on experiences with the expression system, a different<br/>complexity of the protein could make another tag necessary. In case you have a special<br/>request, please contact us.</b> |

## Product Details

---

**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.

---

**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:** CYP4V2

---

**Alternative Name:** CYP4V2 ([CYP4V2 Products](#))

---

**Background:** Cytochrome P450 4V2 (Docosahexaenoic acid omega-hydroxylase CYP4V2) (EC 1.14.14.79) (Long-chain fatty acid omega-monooxygenase) (EC 1.14.14.80),FUNCTION: A cytochrome P450 monooxygenase involved in fatty acid metabolism in the eye. Catalyzes the omega-hydroxylation of polyunsaturated fatty acids (PUFAs) docosahexaenoate (DHA) and its precursor eicosapentaenoate (EPA), and may contribute to the homeostasis of these retinal PUFAs (PubMed:22772592). Omega hydroxylates saturated fatty acids such as laurate, myristate and palmitate, the catalytic efficiency decreasing in the following order: myristate > laurate > palmitate (C14>C12>C16) (PubMed:19661213). 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). {ECO:0000269|PubMed:19661213,

---

## Target Details

---

ECO:0000269|PubMed:22772592}.

Molecular Weight: 60.7 kDa

UniProt: [Q6ZWL3](#)

## 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