

# Datasheet for ABIN7565012

# CYP4V2 Protein (AA 1-525) (His tag)



### Overview

Quantity:	1 mg
Target:	CYP4V2
Protein Characteristics:	AA 1-525
Origin:	Mouse
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:	MLWLWLGLSG QKLLLWGAAS AVSLAGATIL ISIFPMLVSY ARKWQQMRSI PSVARAYPLV
	GHALYMKPNN AEFFQQLIYY TEEFRHLPII KLWIGPVPLV ALYKAENVEV ILTSSKQIDK
	SFLYKFLQPW LGLGLLTSTG SKWRTRRKML TPTFHFTILE NFLDVMNEQA NILVNKLEKH
	VNQEAFNCFF YITLCALDII CETAMGKNIG AQSNNDSEYV RTVYRMSDMI YRRMKMPWLW
	FDLWYLVFKE GRDHKRGLKC LHTFTNNVIA ERVKERKAEE DWTGAGRGPI PSKNKRKAFL
	DLLLSVTDEE GNRLSQEDIR EEVDTFMFEG HDTTAAAINW SLYLLGTNPE VQRKVDQELD
	EVFGRSHRPV TLEDLKKLKY LDCVIKETLR VFPSVPLFAR SLSEDCEVGG YKVTKGTEAI
	IIPYALHRDP RYFPDPEEFR PERFFPENSQ GRHPYAYVPF SAGPRNCIGQ KFAVMEEKTI
	LACILRQFWV ESNQKREELG LAGDLILRPN NGIWIKLKRR HEDDP 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.

#### **Product Details**

Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
epesitions.	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 state of the
	<ul> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>
	<ul> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	otate of the art algorithm used for plasmid design (defic 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 protei
	cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPL
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. Omega hydroxylates saturated fatty acids such as laurate, myristate and palmitate, t
	i of As. Officya nyuroxyiates saturateu ratty acius such as idurate, mynstate anu pairiitate, t

 $\{ECO: 0000250 | UniProtKB: Q6ZWL3\}.$ 

catalytic efficiency decreasing in the following order: myristate > laurate > palmitate

NADPH via cytochrome P450 reductase (CPR, NADPH-ferrihemoprotein reductase).

(C14>C12>C16). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by

### **Target Details**

Molecular Weight:	60.9 kDa
UniProt:	Q9DBW0

## **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