

Datasheet for ABIN7546790
CYP2R1 Protein (AA 1-501) (His tag)



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Overview

Quantity:	1 mg
Target:	CYP2R1
Protein Characteristics:	AA 1-501
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP2R1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYP2R1 Protein expressed in mammalian cells.
Sequence:	MWKLWRAEEG AAALGGALFL LLFALGVRQL LKQRRPMGFP PGPPGLPFIG NIYSLAASSE LPHVYMRKQS QVYGEIFSLD LGGISTVVLN GYDVVKECLV HQSEIFADRP CLPLFMKMTK MGLLNSRYG RGWVDHRRRLA VNSFRYFGYG QKSFESKILE ETKFFNDAIE TYKGRPFDFK QLITNAVSNI TNLIIFGERF TYEDTDFQHM IELFSENVEL AASASVFLYN AFPWIGILPF GKHQQLFRNA AVVYDFLSRL IEKASVNRKP QLPQHFDV DAY LDEM DQGKND PSSTFSKENL IFSVGELIIA GTETTTNVLR WAILFMALYP NIQQVQKEI DLIMGPNPK SWDDKCKMPY TEAVLHEVLR FCNIVPLGIF HATSEDAVVR GYSIPKGTTV ITNLYSVHFD EKYWRDPEVF HPERFLDSSG YFAKKEALVP FSLGRRHCLG EHLARMEMFL FFTALLQRFH LHFPHLVPD LKPRLGMTLQ POPYLICAER R 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:

CYP2R1

Alternative Name:

CYP2R1 ([CYP2R1 Products](#))

Background:

Vitamin D 25-hydroxylase (EC 1.14.14.24) (Cytochrome P450 2R1),FUNCTION: A cytochrome P450 monooxygenase involved in activation of vitamin D precursors. Catalyzes hydroxylation at C-25 of both forms of vitamin D, vitamin D(2) and D(3) (calcidiol) (PubMed:12867411, PubMed:15465040, PubMed:18511070). Can metabolize vitamin D analogs/prodrugs 1alpha-hydroxyvitamin D(2) (doxercalciferol) and 1alpha-hydroxyvitamin D(3) (alfacalcidol) forming 25-hydroxy derivatives (PubMed:15465040, PubMed:18511070). 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:12867411, PubMed:15465040, PubMed:18511070). {ECO:0000269|PubMed:12867411, ECO:0000269|PubMed:15465040, ECO:0000269|PubMed:18511070}.

Molecular Weight:

57.4 kDa

Target Details

UniProt: [Q6VVX0](#)

Pathways: [Metabolism of Steroid Hormones and Vitamin D](#)

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
