Datasheet for ABIN7546826

CYP2C19 Protein (AA 1-490) (His tag)

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Overview

Quantity:	1 mg
Target:	CYP2C19
Protein Characteristics:	AA 1-490
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP2C19 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYP2C19 Protein expressed in mammalian cells.
Sequence:	MDPFVVLVLC LSCLLLLSIW RQSSGRGKLP PGPTPLPVIG NILQIDIKDV SKSLTNLSKI YGPVFTLYFG LERMVVLHGY EVVKEALIDL GEEFSGRGHF PLAERANRGF GIVFSNGKRW KEIRRFSLMT LRNFGMGKRS IEDRVQEEAR CLVEELRKTK ASPCDPTFIL GCAPCNVICS IIFQKRFDYK DQQFLNLMEK LNENIRIVST PWIQICNNFP TIIDYFPGTH NKLLKNLAFM ESDILEKVKE HQESMDINNP RDFIDCFLIK MEKEKQNQQS EFTIENLVIT AADLLGAGTE TTSTTLRYAL LLLLKHPEVT AKVQEEIERV IGRNRSPCMQ DRGHMPYTDA VVHEVQRYID LIPTSLPHAV TCDVKFRNYL IPKGTTILTS LTSVLHDNKE FPNPEMFDPR HFLDEGGNFK KSNYFMPFSA GKRICVGEGL ARMELFLFLT FILQNFNLKS LIDPKDLDTT PVVNGFASVP PFYQLCFIPV **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:	CYP2C19
Alternative Name:	CYP2C19 (CYP2C19 Products)
Background:	Cytochrome P450 2C19 (EC 1.14.14.1) ((R)-limonene 6-monooxygenase) (EC 1.14.14.53) ((S)-limonene 6-monooxygenase) (EC 1.14.14.51) ((S)-limonene 7-monooxygenase) (EC 1.14.14.52) (CYPIIC17) (CYPIIC19) (Cytochrome P450-11A) (Cytochrome P450-254C) (Fenbendazole monooxygenase (4'-hydroxylating)) (EC 1.14.14.75) (Mephenytoin 4-hydroxylase),FUNCTION: A cytochrome P450 monooxygenase involved in the metabolism of polyunsaturated fatty acids (PUFA) (PubMed:18577768, PubMed:19965576, PubMed:20972997). 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:18577768, PubMed:19965576, PubMed:20972997). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates PUFA specifically at the omega-1 position (PubMed:18577768). Catalyzes the epoxidation of double bonds of PUFA (PubMed:20972997, PubMed:19965576). Also metabolizes plant monoterpenes such as

Target Details

	limonene. Oxygenates (R)- and (S)-limonene to produce carveol and perillyl alcohol (PubMed:11950794). Responsible for the metabolism of a number of therapeutic agents such as the anticonvulsant drug S-mephenytoin, omeprazole, proguanil, certain barbiturates, diazepam, propranolol, citalopram and imipramine. Hydroxylates fenbendazole at the 4' position (PubMed:23959307). {ECO:0000269|PubMed:11950794, ECO:0000269|PubMed:18577768, ECO:0000269|PubMed:19965576, ECO:0000269|PubMed:20972997, ECO:0000269|PubMed:23959307}.
Molecular Weight:	55.9 kDa
UniProt:	P33261

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