

Cytochrome P450 2C9 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51913

Specification

Cytochrome P450 2C9 Antibody - Product Information

Application	WB, E
Primary Accession	P11712
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56 KDa

Cytochrome P450 2C9 Antibody - Additional Information

Gene ID 1559

Other Names

Cytochrome P450 2C9, 11413-, (R)-limonene 6-monooxygenase, (S)-limonene 6-monooxygenase, (S)-limonene 7-monooxygenase, CYP11C9, Cytochrome P-450MP, Cytochrome P450 MP-4, Cytochrome P450 MP-8, Cytochrome P450 PB-1, S-mephenytoin 4-hydroxylase, CYP2C9, CYP2C10

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Cytochrome P450 2C9 Antibody - Protein Information

Name CYP2C9 {ECO:0000303|PubMed:11950794, ECO:0000312|HGNC:HGNC:2623}

Function

A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids and steroids (PubMed: 12865317, PubMed: 15766564, PubMed: 19965576, PubMed: 21576599, PubMed: 7574697, PubMed: 9435160, PubMed: 9866708). 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: 12865317, PubMed: 15766564, PubMed: 19965576, PubMed: 12865317, PubMed: 15766564, PubMed: 19965576, PubMed: 12865317, PubMed: 15766564, PubMed: 19965576).

<http://www.uniprot.org/citations/21576599> target="_blank">21576599, PubMed:7574697, PubMed:9435160, PubMed:9866708). Catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) (PubMed:15766564, PubMed:19965576, PubMed:7574697, PubMed:9866708). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes cholesterol toward 25-hydroxycholesterol, a physiological regulator of cellular cholesterol homeostasis (PubMed:21576599). Exhibits low catalytic activity for the formation of catechol estrogens from 17beta- estradiol (E2) and estrone (E1), namely 2-hydroxy E1 and E2 (PubMed:12865317). Catalyzes bisallylic hydroxylation and hydroxylation with double-bond migration of polyunsaturated fatty acids (PUFA) (PubMed:9435160, PubMed:9866708). Also metabolizes plant monoterpenes such as limonene. Oxygenates (R)- and (S)-limonene to produce carveol and perillyl alcohol (PubMed:11950794). Contributes to the wide pharmacokinetics variability of the metabolism of drugs such as S- warfarin, diclofenac, phenytoin, tolbutamide and losartan (PubMed:25994031).

Cellular Location

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Cytochrome P450 2C9 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Cytochrome P450 2C9 Antibody - Images

Cytochrome P450 2C9 Antibody - Background

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. This enzyme contributes to the wide pharmacokinetics variability of the metabolism of drugs such as S- warfarin, diclofenac, phenytoin, tolbutamide and losartan.

Cytochrome P450 2C9 Antibody - References

Meehan R.R.,et al.Am. J. Hum. Genet. 42:26-37(1988).
Kimura S.,et al.Nucleic Acids Res. 15:10053-10054(1987).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Deloukas P., et al. Nature 429:375-381(2004).

Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.