

Anti-Cytochrome P450 2C9 Antibody

Catalog # AP53664

Specification

Anti-Cytochrome P450 2C9 Antibody - Product Information

Application	WB
Primary Accession	P11712
Other Accession	O5VX92, Q8WW80
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55628

Anti-Cytochrome P450 2C9 Antibody - Additional Information

Gene ID 1559

Target/Specificity

Recognizes endogenous levels of Cytochrome P450 2C9 protein.

Dilution

WB~~1/500 - 1/1000

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

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

Anti-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:>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

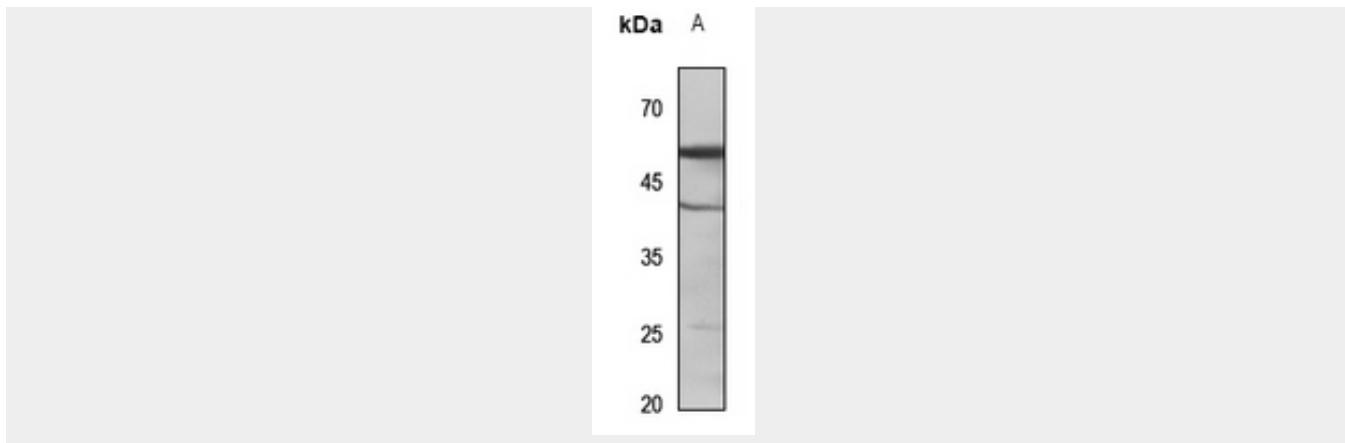
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Anti-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](#)

Anti-Cytochrome P450 2C9 Antibody - Images



Western blot analysis of Cytochrome P450 2C9 expression in mouse liver (A) whole cell lysates.

Anti-Cytochrome P450 2C9 Antibody - Background

Rabbit polyclonal antibody to Cytochrome P450 2C9