

**Cytochrome P450 2C9 Antibody**  
Rabbit mAb  
Catalog # AP91976**Specification****Cytochrome P450 2C9 Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P11712</a>
Clonality	Monoclonal
<b>Other Names</b>	
CPC9; CYP2C; CYP2C10; CYP2C9; CYP2C9; CYP2C9; CYP2C9; CYP2C9; P450 PB1; P450MP;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	55628 Da

**Cytochrome P450 2C9 Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Cytochrome P450 2C9
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**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: <a href="http://www.uniprot.org/citations/12865317" target="\_blank">12865317</a>, PubMed: <a href="http://www.uniprot.org/citations/15766564" target="\_blank">15766564</a>, PubMed: <a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed: <a href="http://www.uniprot.org/citations/21576599" target="\_blank">21576599</a>, PubMed: <a href="http://www.uniprot.org/citations/7574697" target="\_blank">7574697</a>, PubMed: <a href="http://www.uniprot.org/citations/9435160" target="\_blank">9435160</a>, PubMed: <a href="http://www.uniprot.org/citations/9866708" target="\_blank">9866708</a>).

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

#### Cellular Location

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

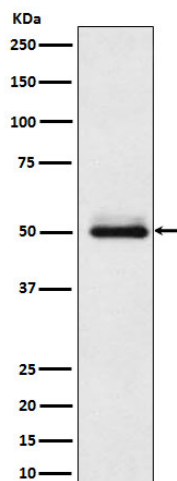
#### Cytochrome P450 2C9 Antibody - Protocols

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





Western blot analysis of Cytochrome P450 2C9 expression in HepG2 cell lysate.