

Anti-Cytochrome P450 2C8/9/18/19 Antibody

Catalog # AP54068

## Specification

## Anti-Cytochrome P450 2C8/9/18/19 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IF, IHC <u>P10632</u> <u>P11712</u>, <u>P33260</u>, <u>P33261</u> Human, Mouse, Rat Rabbit Polyclonal 55825

## Anti-Cytochrome P450 2C8/9/18/19 Antibody - Additional Information

Gene ID 1558

**Other Names** 

CYP2C8; Cytochrome P450 2C8; CYPIIC8; Cytochrome P450 IIC2; Cytochrome P450 MP-12; Cytochrome P450 MP-20; Cytochrome P450 form 1; S-mephenytoin 4-hydroxylase; CYP2C9; CYP2C10; Cytochrome P450 2C9; (R)-limonene 6-monooxygenase; (S)-limonene 6-monooxygenase; (S)-limonene 7-monooxygenase; CYPIIC9; Cytochrome P-450MP; Cytochrome P450 MP-4; Cytochrome P450 MP-8; Cytochrome P450 PB-1; S-mephenytoin 4-hydroxylase; CYP2C18; Cytochrome P450 2C18; CYPIIC18; Cytochrome P450-6b/29c; CYP2C19; Cytochrome P450 2C19; (R)-limonene 6-monooxygenase; (S)-limonene 6-monooxygenase; (S)-limonene 7-monooxygenase; CYPIIC17; CYPIIC19; Cytochrome P450-11A; Cytochrome P450-254C; Mephenytoin 4-hydroxylase

## Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 2C8/9/18/19. The exact sequence is proprietary.

**Dilution** WB~~1/500 - 1/1000 IF~~1/50 - 1/200 IHC~~1:100~500

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 2C8/9/18/19 Antibody - Protein Information

Name CYP2C8 {ECO:0000303|PubMed:7574697, ECO:0000312|HGNC:HGNC:2622}



## Function

A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins (PubMed:<a href="http://www.uniprot.org/citations/11093772" target="\_blank">11093772</a>, PubMed:<a href="http://www.uniprot.org/citations/14559847" target=" blank">14559847</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/7574697" target=" blank">7574697</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/11093772" target=" blank">11093772</a>, PubMed:<a href="http://www.uniprot.org/citations/14559847" target=" blank">14559847</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/7574697" target=" blank">7574697</a>). Primarily catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) with a preference for the last double bond (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>). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes all trans-retinoic acid toward its 4-hydroxylated form (PubMed:<a href="http://www.uniprot.org/citations/11093772" target=" blank">11093772</a>). Displays 16-alpha hydroxylase activity toward estrogen steroid hormones, 17beta-estradiol (E2) and estrone (E1) (PubMed:<a href="http://www.uniprot.org/citations/14559847" target=" blank">14559847</a>). Plays a role in the oxidative metabolism of xenobiotics. It is the principal enzyme responsible for the metabolism of the anti-cancer drug paclitaxel (taxol) (PubMed:<a href="http://www.uniprot.org/citations/26427316" target=" blank">26427316</a>).

## **Cellular Location**

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

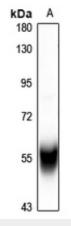
## Anti-Cytochrome P450 2C8/9/18/19 Antibody - Protocols

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

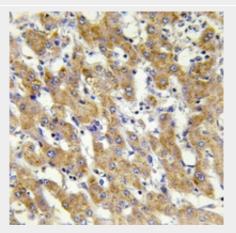
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Cytochrome P450 2C8/9/18/19 Antibody - Images

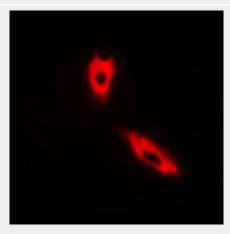




Western blot analysis of Cytochrome P450 2C8/9/18/19 expression in rat liver (A) whole cell lysates.



Immunohistochemical analysis of Cytochrome P450 2C8/9/18/19 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Cytochrome P450 2C8/9/18/19 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in



# PBS at room temperature in the dark.

Anti-Cytochrome P450 2C8/9/18/19 Antibody - Background

Rabbit polyclonal antibody to Cytochrome P450 2C8/9/18/19