

**Anti-Cytochrome P450 2C19 Antibody**  
**Rabbit polyclonal antibody to Cytochrome P450 2C19**  
**Catalog # AP60448****Specification**

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**Anti-Cytochrome P450 2C19 Antibody - Product Information**

Application	WB, IF/IC, IHC
Primary Accession	<a href="#">P33261</a>
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55945

**Anti-Cytochrome P450 2C19 Antibody - Additional Information****Gene ID** 1557**Other Names**

Cytochrome P450 2C19; (R)-limonene 6-monooxygenase; (S)-limonene 6-monooxygenase; (S)-limonene 7-monooxygenase; CYP11C17; CYP11C19; Cytochrome P450-11A; Cytochrome P450-254C; Mephenytoin 4-hydroxylase

**Target/Specificity**

Recognizes endogenous levels of Cytochrome P450 2C19 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF/IC~~N/A

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 2C19 Antibody - Protein Information****Name** CYP2C19**Function**

A cytochrome P450 monooxygenase involved in the metabolism of polyunsaturated fatty acids (PUFA) (PubMed: <a href="http://www.uniprot.org/citations/18577768" target="\_blank">18577768</a>, PubMed: <a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed: <a href="http://www.uniprot.org/citations/20972997" target="\_blank">20972997</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/18577768" target="\_blank">18577768</a>, PubMed:<a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed:<a href="http://www.uniprot.org/citations/20972997" target="\_blank">20972997</a>). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates PUFA specifically at the omega-1 position (PubMed:<a href="http://www.uniprot.org/citations/18577768" target="\_blank">18577768</a>). Catalyzes the epoxidation of double bonds of PUFA (PubMed:<a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed:<a href="http://www.uniprot.org/citations/20972997" target="\_blank">20972997</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>). 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:<a href="http://www.uniprot.org/citations/23959307" target="\_blank">23959307</a>).

### Cellular Location

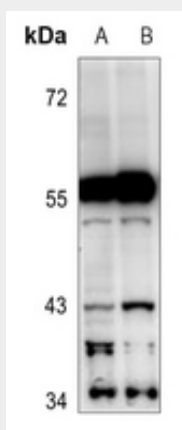
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

### Anti-Cytochrome P450 2C19 Antibody - Protocols

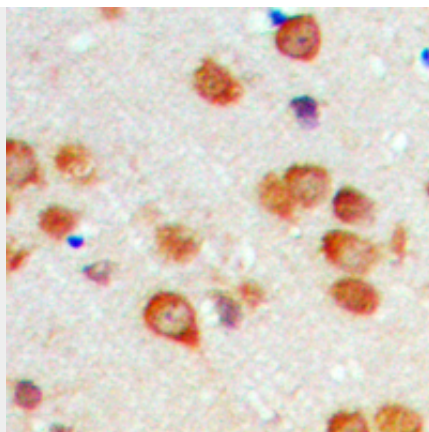
Provided below are standard protocols that you may find useful for product applications.

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

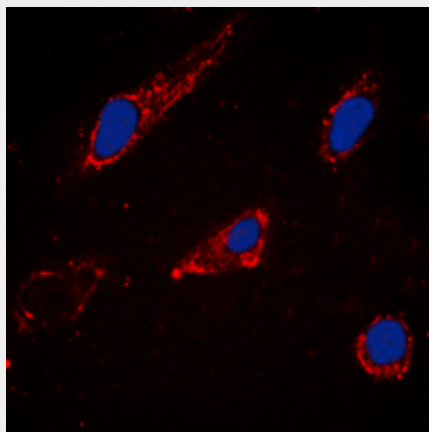
### Anti-Cytochrome P450 2C19 Antibody - Images



Western blot analysis of Cytochrome P450 2C19 expression in HepG2 (A), SGC7901 (B) whole cell lysates.



Immunohistochemical analysis of Cytochrome P450 2C19 staining in human brain 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 2C19 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 humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

#### **Anti-Cytochrome P450 2C19 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 2C19. The exact sequence is proprietary.