

Anti-Cytochrome P450 2C19 Antibody

Rabbit polyclonal antibody to Cytochrome P450 2C19 Catalog # AP60448

Specification

Anti-Cytochrome P450 2C19 Antibody - Product Information

Application WB, IF/IC, IHC

Primary Accession <u>P33261</u>

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; 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 2C19. The exact sequence is proprietary.

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:18577768, PubMed:19965576, PubMed:20972997). 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:18577768, PubMed:19965576, PubMed:20972997). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates PUFA specifically at the omega-1 position (PubMed:18577768). Catalyzes the epoxidation of double bonds of PUFA (PubMed:19965576, PubMed:20972997). Also metabolizes plant monoterpenes such as limonene. Oxygenates (R)- and (S)-limonene to produce carveol and perillyl alcohol (PubMed:11950794). Responsible for the metabolism of a number of therapeutic

barbiturates, diazepam, propranolol, citalogram and imipramine. Hydroxylates fenbendazole at the

Cellular Location

target=" blank">23959307).

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

agents such as the anticonvulsant drug S-mephenytoin, omeprazole, proguanil, certain

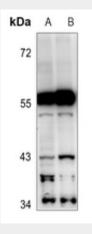
4' position (PubMed:<a href="http://www.uniprot.org/citations/23959307"

Anti-Cytochrome P450 2C19 Antibody - Protocols

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

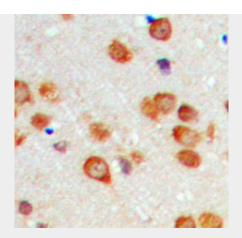
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Cytochrome P450 2C19 Antibody - Images

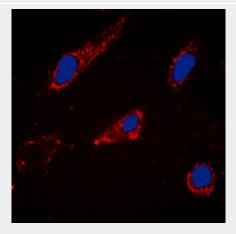


Western blot analysis of Cytochrome P450 2C19 expression in HepG2 (A), SGC7901 (B) whole cell lysates.





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 hidified 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

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