

CYP2C19 Polyclonal Antibody

Catalog # AP69393

Product Information

Application WB, IHC-P, IF
Primary Accession P33261
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 55945

Additional Information

Gene ID 1557

Other Names 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

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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

citalopram and imipramine. Hydroxylates fenbendazole at the 4' position (PubMed:23959307).

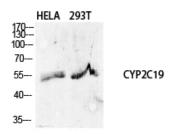
Cellular Location

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

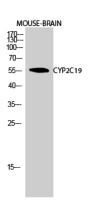
Background

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. Oxygenates (R)- and (S)- limonene to produce carveol and perillyl alcohol (PubMed: 11950794). Hydroxylates fenbendazole at the 4' position (PubMed: 23959307).

Images



Western Blot analysis of various cells using CYP2C19 Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of MOUSE-BRAIN cells using CYP2C19 Polyclonal Antibody diluted at 1: 1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.