

CYP2C8 Polyclonal Antibody

Catalog # AP69395

Product Information

Application	WB, E
Primary Accession	P10632
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55825

Additional Information

Gene ID	1558
Other Names	CYP2C8; Cytochrome P450 2C8; CYP2C8; Cytochrome P450 2C8; Cytochrome P450 MP-12; Cytochrome P450 MP-20; Cytochrome P450 form 1; S-mephenytoin 4-hydroxylase
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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:11093772, PubMed:14559847, PubMed:15766564, PubMed:19965576, PubMed:7574697). 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:11093772, PubMed:14559847, PubMed:15766564, PubMed:19965576, PubMed:7574697). Primarily catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) with a preference for the last double bond (PubMed:15766564, PubMed:19965576, PubMed:7574697). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes all trans-retinoic acid toward its 4-hydroxylated form (PubMed:11093772). Displays 16-alpha hydroxylase activity toward estrogen steroid hormones, 17beta-estradiol (E2) and estrone (E1) (PubMed:14559847). 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:[26427316](#)).

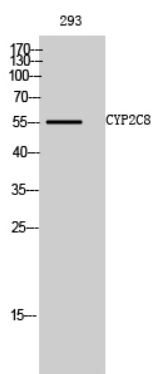
Cellular Location

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

Background

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. In the epoxidation of arachidonic acid it generates only 14,15- and 11,12-cis-epoxyeicosatrienoic acids. It is the principal enzyme responsible for the metabolism the anti- cancer drug paclitaxel (taxol).

Images



Western Blot analysis of 293 cells using CYP2C8
Polyclonal Antibody diluted at 1 : 1000

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