10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Catalog # AP54068

Product Information

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

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 IHC~~1/50 - 1/200 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

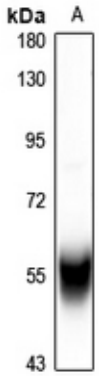
Name	CYP2C8 {ECO:0000303|PubMed:7574697, ECO:0000312|HGNC:HGNC:2622}
Function	A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins (PubMed:11093772, PubMed:14559847, PubMed:15766564, PubMed:19965576, PubMed:7574697). 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).

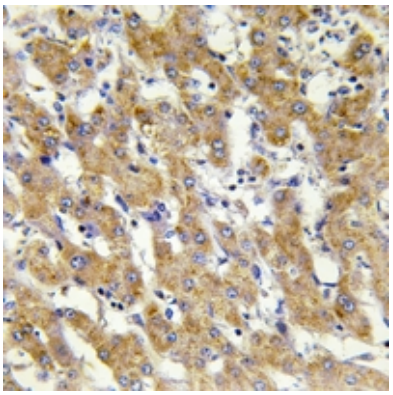
Cellular Location

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

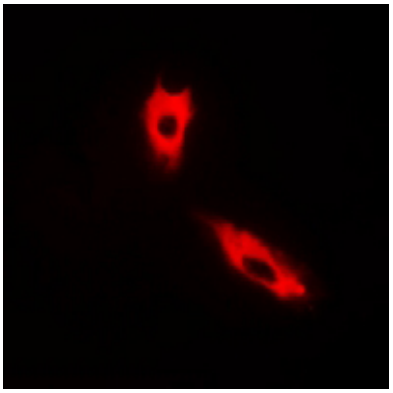
Images



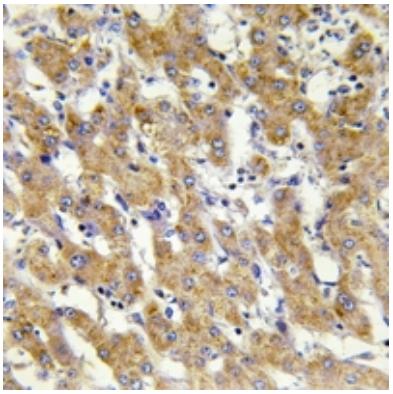
Western blot analysis of Cytochrome P450 2C8/9/18/19 expression in rat liver (A) whole cell lysates. (Predicted band size: 55 kD; Observed band size: 56 kD)



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.



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.

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