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CYP2W1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14565

Product Information

Application	WB
Primary Accession	Q8TAV3
Other Accession	NM_017781, NP_060251
Reactivity	Human, Rat, Pig, Dog, Horse, Bovine
Predicted	Human, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53844

Additional Information

Gene ID	54905
Alias Symbol	MGC34287
Other Names	Cytochrome P450 2W1, 1.14.14.-, CYPIIW1, CYP2W1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CYP2W1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CYP2W1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CYP2W1 {ECO:0000303|PubMed:26936974, ECO:0000312|HGNC:HGNC:20243}
Function	A cytochrome P450 monooxygenase that may play a role in retinoid and phospholipid metabolism (PubMed:22591743, PubMed:26936974). Catalyzes the hydroxylation of saturated carbon hydrogen bonds. Hydroxylates all trans-retinoic acid (atRA) to 4- hydroxyretinoate and may regulate atRA clearance. Other retinoids such as all-trans retinol and all-trans retinal are potential endogenous substrates (PubMed:26936974). Catalyzes both epoxidation of double bonds and hydroxylation of carbon hydrogen bonds of the fatty acyl chain of 1-acylphospholipids/2-lysophospholipids. Can metabolize various lysophospholipids classes including lysophosphatidylcholines (LPCs), lysophosphatidylinositols (LPIs),

	lysophosphatidylserines (LPSs), lysophosphatidylglycerols (LPGs), lysophosphatidylethanolamines (LPEs) and lysophosphatidic acids (LPAs) (PubMed:22591743). Has low or no activity toward 2-acylphospholipids/1-lysophospholipids, diacylphospholipids and free fatty acids (PubMed:22591743, PubMed:26936974). May play a role in tumorigenesis by activating procarcinogens such as aflatoxin B1, polycyclic aromatic hydrocarbon dihydrodiols and aromatic amines (PubMed:16551781, PubMed:20805301, PubMed:24278521). 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 (CPR; NADPH-ferrihemoprotein reductase) (PubMed:22591743, PubMed:26936974).
Cellular Location	Endoplasmic reticulum lumen. Cell membrane. Microsome membrane. Note=About 8% are expressed on the cell surface.
Tissue Location	Very low levels are detected in fetal and adult tissues. Highly expressed in several tumor samples, in particular colon and adrenal tumors.

References

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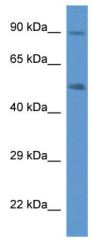
Karlgren M.,et al.Biochem. Biophys. Res. Commun. 341:451-458(2006).
Wu Z.L.,et al.Mol. Pharmacol. 69:2007-2014(2006).
Gomez A.,et al.Mol. Pharmacol. 78:1004-1011(2010).
Eun C.Y.,et al.Toxicol. Res. 26:171-175(2010).

Images



WB Suggested Anti-CYP2W1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Lung

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