

Cytochrome P450 2W1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53339

Specification

Cytochrome P450 2W1 Antibody - Product Information

Application	WB
Primary Accession	Q8TAV3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54 KDa
Antigen Region	311-360

Cytochrome P450 2W1 Antibody - Additional Information

Gene ID 54905

Dilution

WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Cytochrome P450 2W1 Antibody - 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)

target="_blank">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

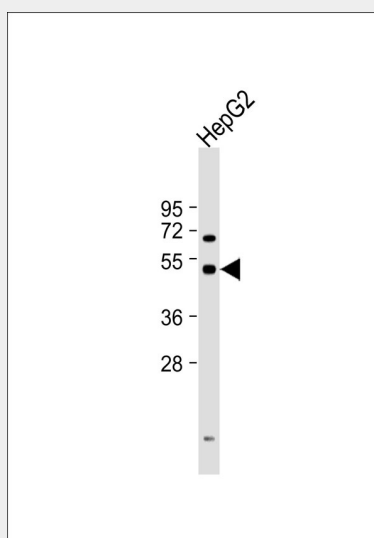
Very low levels are detected in fetal and adult tissues. Highly expressed in several tumor samples, in particular colon and adrenal tumors.

Cytochrome P450 2W1 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 Cytometry](#)
- [Cell Culture](#)

Cytochrome P450 2W1 Antibody - Images



Anti-Cytochrome P450 2W1 Antibody at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated

at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Cytochrome P450 2W1 Antibody - Background

Seems to have broad catalytic activity towards several chemicals, including polycyclic aromatic hydrocarbon dihydrodiols and aromatic amines (PubMed:16551781, PubMed:24278521). Active also in the metabolism of indoline substrates and is able to activate aflatoxin B1 into cytotoxic products (PubMed:20805301). Furthermore, it seems to be involved in the oxidation of lysophospholipids and fatty acids (PubMed:22591743).

Cytochrome P450 2W1 Antibody - References

- Hillier L.W., et al. Nature 424:157-164(2003).
Karlgrén 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).