

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

**Specification**

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**Cytochrome P450 2W1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q8TAV3</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54 KDa
Antigen Region	311-360

**Cytochrome P450 2W1 Antibody - Additional Information**

**Gene ID** 54905

**Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 2W1. The exact sequence is proprietary.

**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:<a href="http://www.uniprot.org/citations/22591743" target="\_blank">22591743</a>, PubMed:<a href="http://www.uniprot.org/citations/26936974" target="\_blank">26936974</a>). 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:<a href="http://www.uniprot.org/citations/26936974" target="\_blank">26936974</a>). 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:<a href="http://www.uniprot.org/citations/22591743" target="\_blank">22591743</a>). Has low or no activity toward 2-acylphospholipids/1-lysophospholipids, diacylphospholipids and free fatty acids (PubMed:<a href="http://www.uniprot.org/citations/22591743" target="\_blank">22591743</a>, PubMed:<a href="http://www.uniprot.org/citations/26936974" target="\_blank">26936974</a>). May play a role in tumorigenesis by activating procarcinogens such as aflatoxin B1, polycyclic aromatic hydrocarbon dihydrodiols and aromatic amines (PubMed:<a href="http://www.uniprot.org/citations/16551781" target="\_blank">16551781</a>, PubMed:<a href="http://www.uniprot.org/citations/20805301" target="\_blank">20805301</a>, PubMed:<a href="http://www.uniprot.org/citations/24278521" target="\_blank">24278521</a>). 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:<a href="http://www.uniprot.org/citations/22591743" target="\_blank">22591743</a>, PubMed:<a href="http://www.uniprot.org/citations/26936974" target="\_blank">26936974</a>).

#### Cellular Location

Endoplasmic reticulum lumen. Cell membrane. Microsome membrane. Note=About 8% are expressed on the cell surface.

#### Tissue Location

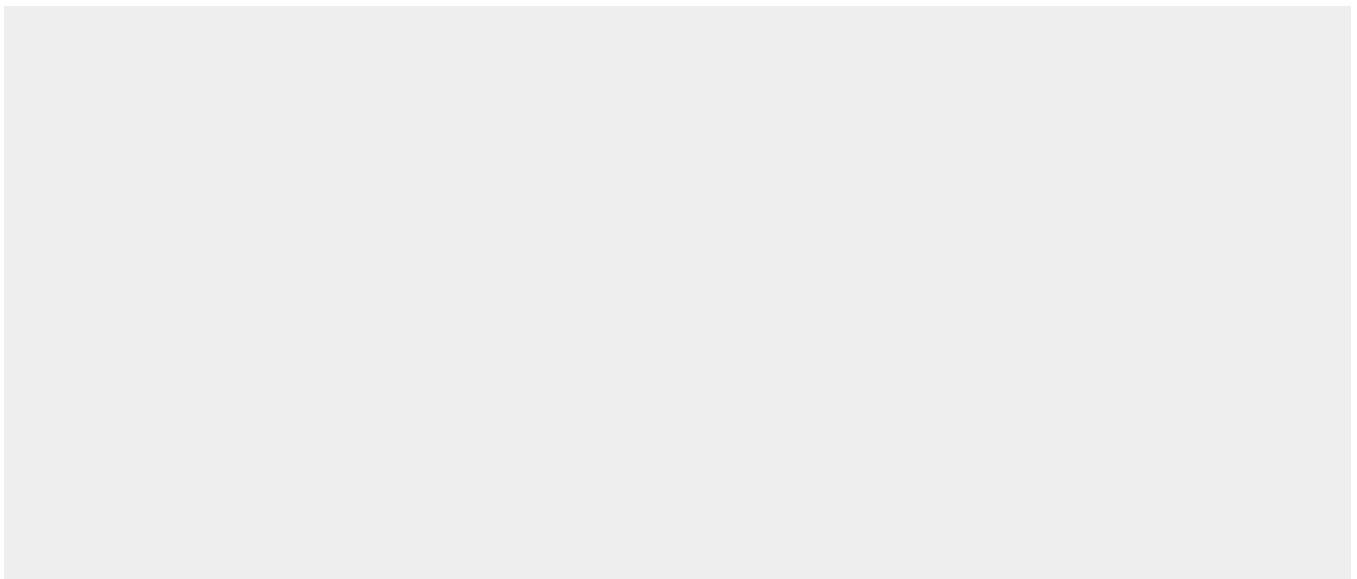
Very low levels are detected in fetal and adult tissues. Highly expressed in several tumor samples, in particular colon and adrenal tumors.

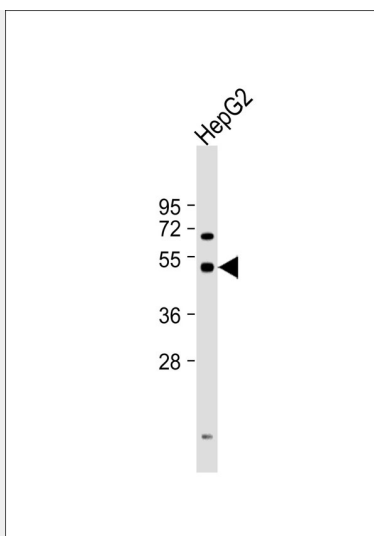
#### Cytochrome P450 2W1 Antibody - Protocols

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).
- 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).