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CYP2W1 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7792a

Specification

CYP2W1 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q8TAV3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**53844**
Antigen Region	**7-33**

CYP2W1 Antibody (N-term) - Additional Information

Gene ID 54905

Other Names
Cytochrome P450 2W1, 11414-, CYPIIW1, CYP2W1

Target/Specificity
This CYP2W1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-33 amino acids from the N-terminal region of human CYP2W1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CYP2W1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP2W1 Antibody (N-term) - 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.

CYP2W1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CYP2W1 Antibody (N-term) - Images

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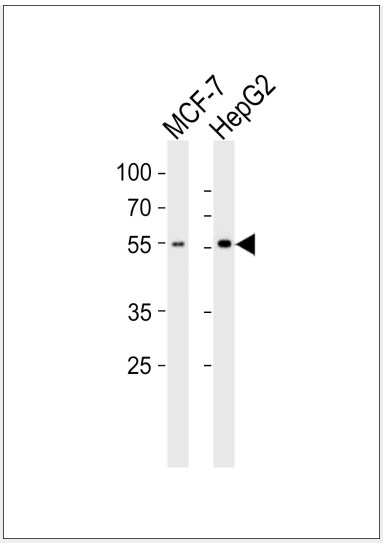
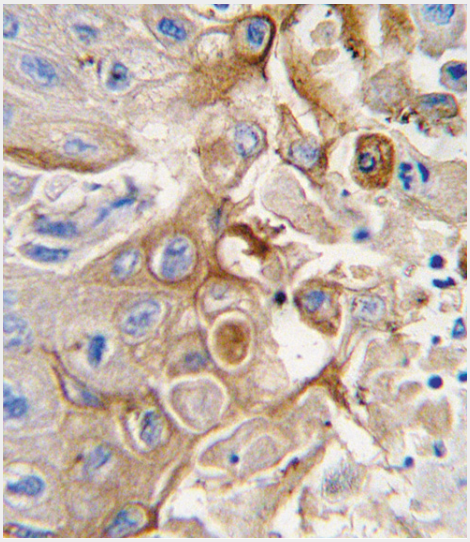


Western blot analysis of lysates from MCF-7, HepG2 cell line (from left to right), using CYP2W1 Antibody (N-term)(Cat. #AP7792a). AP7792a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CYP2W1 antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CYP2W1 Antibody (N-term) - Background

CYP2W1 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids.

CYP2W1 Antibody (N-term) - References

Gomez,A., Pharmacogenomics 8 (10), 1315-1325 (2007)
Karlgren,M., Biochem. Biophys. Res. Commun. 341 (2), 451-458 (2006)
Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)