

**CYP2B6 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP11104C****Specification**

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**CYP2B6 Antibody (Center) - Product Information**

Application	WB, IHC-P, IF,E
Primary Accession	<a href="#">P20813</a>
Other Accession	<a href="#">NP_000758.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	235-263

**CYP2B6 Antibody (Center) - Additional Information****Gene ID** 1555**Other Names**

Cytochrome P450 2B6, 11413-, 4-cineole 2-exo-monooxygenase, CYP11B6, Cytochrome P450 IIB1, CYP2B6

**Target/Specificity**

This CYP2B6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 235-263 amino acids from the Central region of human CYP2B6.

**Dilution**

WB~~1:2000

IHC-P~~1:10~50

IF~~1:25

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

CYP2B6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**CYP2B6 Antibody (Center) - Protein Information****Name** CYP2B6 {ECO:0000303|PubMed:21289075, ECO:0000312|HGNC:HGNC:2615}

**Function** A cytochrome P450 monooxygenase involved in the metabolism of endocannabinoids and steroids (PubMed:[12865317](#), PubMed:[21289075](#)). 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). Catalyzes the epoxidation of double bonds of arachidonylethanolamide (anandamide) to 8,9-, 11,12-, and 14,15- epoxyeicosatrienoic acid ethanolamides (EpETRe-EAs), potentially modulating endocannabinoid system signaling (PubMed:[21289075](#)). Hydroxylates steroid hormones, including testosterone at C-16 and estrogens at C-2 (PubMed:[12865317](#), PubMed:[21289075](#)). Plays a role in the oxidative metabolism of xenobiotics, including plant lipids and drugs (PubMed:[11695850](#), PubMed:[22909231](#)). Acts as a 1,4-cineole 2-exo- monooxygenase (PubMed:[11695850](#)).

#### Cellular Location

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

#### Tissue Location

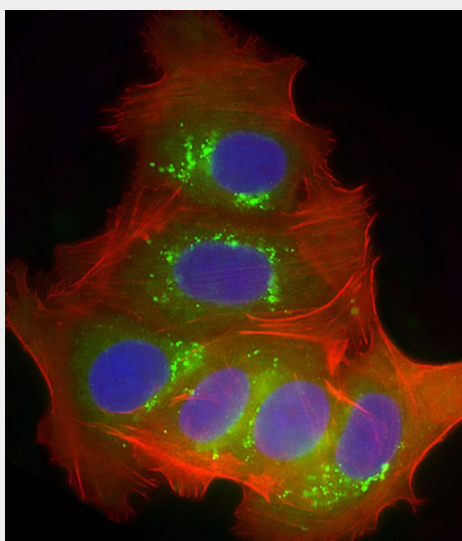
Expressed in liver, lung and heart right ventricle.

### CYP2B6 Antibody (Center) - Protocols

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

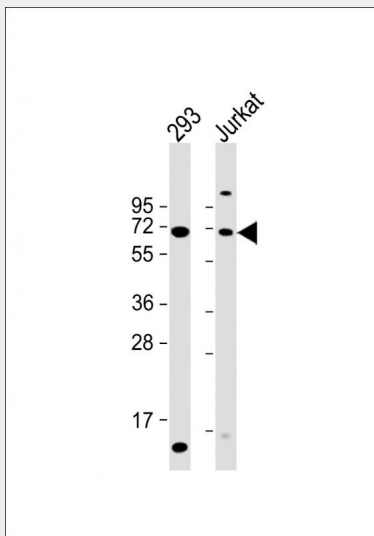
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CYP2B6 Antibody (Center) - Images

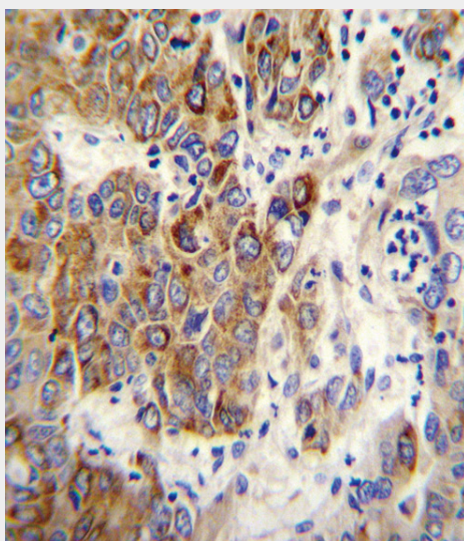


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF-7 (human breast cancer cell line) cells labeling CYP2B6 with AP11104C at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at

1/200 dilution (green). Immunofluorescence image showing endosomes staining on MCF-7 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



All lanes : Anti-CYP2B6 Antibody (Center) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: Jurkat 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 : 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



CYP2B6 Antibody (Center) (Cat. #AP11104c) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CYP2B6 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

### CYP2B6 Antibody (Center) - Background

This gene, CYP2B6, encodes 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. This protein localizes to the endoplasmic reticulum and its expression is induced by phenobarbital. The enzyme is known to metabolize some xenobiotics, such as the anti-cancer drugs

cyclophosphamide and ifosfamide. Transcript variants for this gene have been described; however, it has not been resolved whether these transcripts are in fact produced by this gene or by a closely related pseudogene, CYP2B7. Both the gene and the pseudogene are located in the middle of a CYP2A pseudogene found in a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q.

#### **CYP2B6 Antibody (Center) - References**

Figueroa, S.C., et al. Ther Drug Monit 32(5):579-585(2010)  
Chou, M., et al. Antimicrob. Agents Chemother. 54(10):4432-4439(2010)  
Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)  
Bunten, H., et al. Clin. Pharmacol. Ther. 88(3):383-389(2010)  
Gounden, V., et al. AIDS Res Ther 7, 32 (2010) :

#### **CYP2B6 Antibody (Center) - Citations**

- [Characterization of feline cytochrome P450 2B6.](#)
- [The role of cytochromes p450 and aldo-keto reductases in prognosis of breast carcinoma patients.](#)