

Cytochrome P450 2J2 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51147**Specification**

Cytochrome P450 2J2 Antibody - Product Information

Application	WB
Primary Accession	P51589
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57 KDa
Antigen Region	231 - 290

Cytochrome P450 2J2 Antibody - Additional Information**Gene ID** 1573**Other Names**

Cytochrome P450 2J2, Arachidonic acid epoxigenase, CYP11J2, CYP2J2

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 2J2. The exact sequence is proprietary.

Dilution

WB~~ 1:2000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

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

Cytochrome P450 2J2 Antibody - Protein Information**Name** CYP2J2 {ECO:0000303|PubMed:19737933, ECO:0000312|HGNC:HGNC:2634}**Function**

A cytochrome P450 monooxygenase involved in the metabolism of polyunsaturated fatty acids (PUFA) in the cardiovascular system (PubMed:19965576, PubMed:8631948).

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) (PubMed:19965576, PubMed:8631948). Catalyzes the

epoxidation of double bonds of PUFA (PubMed:19965576, PubMed:8631948). Converts arachidonic acid to four regioisomeric epoxyeicosatrienoic acids (EpETrE), likely playing a major role in the epoxidation of endogenous cardiac arachidonic acid pools (PubMed:8631948). In endothelial cells, participates in eicosanoids metabolism by converting hydroperoxide species into hydroxy epoxy metabolites. In combination with 15- lipoxygenase metabolizes arachidonic acid and converts hydroperoxyicosatetraenoates (HpETEs) into hydroxy epoxy eicosatrienoates (HEETs), which are precursors of vasodilatory trihydroxyicosatrienoic acids (THETAs). This hydroperoxide isomerase activity is NADPH- and O₂-independent (PubMed:19737933). Catalyzes the monooxygenation of a various xenobiotics, such as danazol, amiodarone, terfenadine, astemizole, thioridazine, tamoxifen, cyclosporin A and nabumetone (PubMed:19923256). Catalyzes hydroxylation of the anthelmintics albendazole and fenbendazole (PubMed:23959307). Catalyzes the sulfoxidation of fenbendazole (PubMed:19923256).

Cellular Location

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

Tissue Location

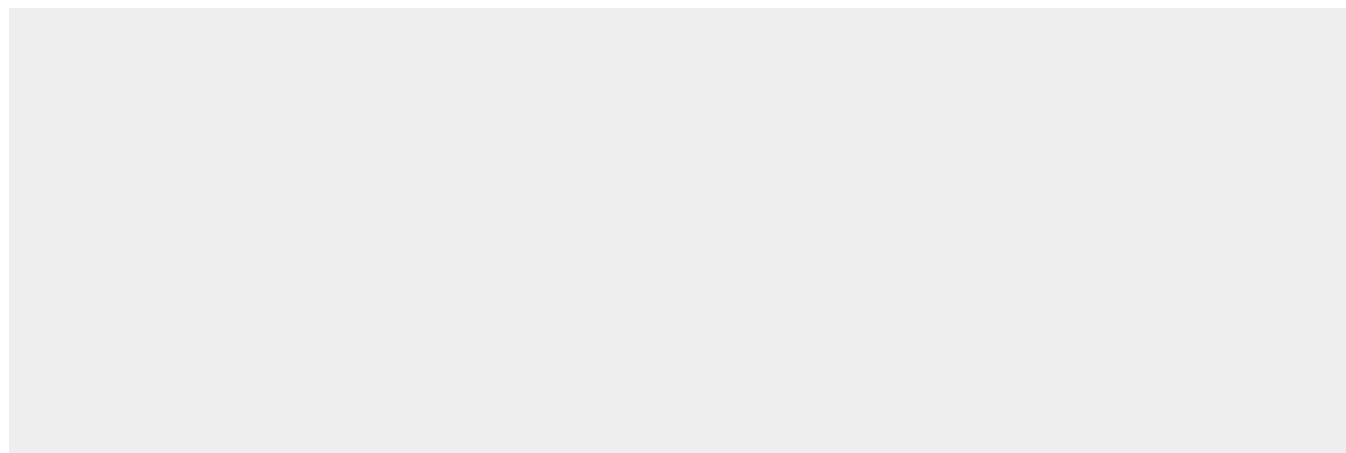
Highly expressed in heart, present at lower levels in liver, kidney and skeletal muscle (at protein level)

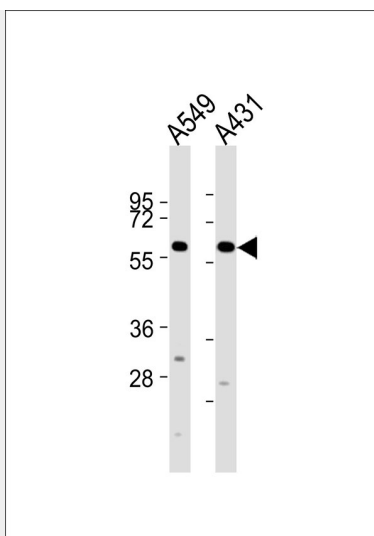
Cytochrome P450 2J2 Antibody - Protocols

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 2J2 Antibody - Images





All lanes : Anti-Cytochrome P450 2J2 Antibody at 1:2000 dilution Lane 1: A549 whole cell lysates
Lane 2: A431 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 58 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Cytochrome P450 2J2 Antibody - Background

This enzyme metabolizes arachidonic acid predominantly via a NADPH-dependent olefin epoxidation to all four regioisomeric cis-epoxyeicosatrienoic acids. One of the predominant enzymes responsible for the epoxidation of endogenous cardiac arachidonic acid pools.

Cytochrome P450 2J2 Antibody - References

Wu S.,et al.J. Biol. Chem. 271:3460-3468(1996).
Wu S.,et al.Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
King L.M.,et al.Mol. Pharmacol. 61:840-852(2002).