

CYP2J2 Polyclonal Antibody
Catalog # AP69404**Specification****CYP2J2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P51589
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal

CYP2J2 Polyclonal Antibody - Additional Information**Gene ID** 1573**Other Names**

CYP2J2; Cytochrome P450 2J2; Arachidonic acid epoxygenase; CYP11J2

Dilution

WB~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

CYP2J2 Polyclonal 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: [8631948](http://www.uniprot.org/citations/8631948)), PubMed: [19965576](http://www.uniprot.org/citations/19965576)). 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: [8631948](http://www.uniprot.org/citations/8631948), PubMed: [19965576](http://www.uniprot.org/citations/19965576)). Catalyzes the epoxidation of double bonds of PUFA (PubMed: [8631948](http://www.uniprot.org/citations/8631948), PubMed: [19965576](http://www.uniprot.org/citations/19965576)). 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](http://www.uniprot.org/citations/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 fenbedazole (PubMed:19923256).

Cellular Location

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

Tissue Location

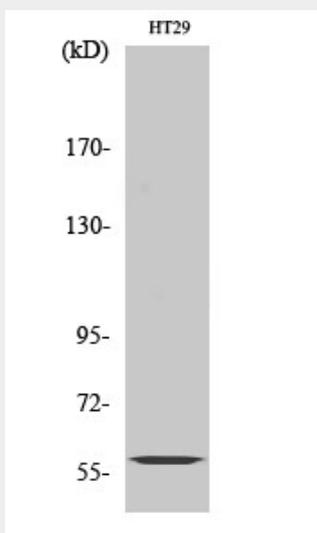
Highly expressed in heart, present at lower levels in liver, kidney and skeletal muscle (at protein level)

CYP2J2 Polyclonal 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](#)

CYP2J2 Polyclonal Antibody - Images



CYP2J2 Polyclonal Antibody - Background

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 (PubMed:8631948). Catalyzes the monooxygenation of a various compounds, 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 fenbedazole (PubMed:19923256).