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CYP2J2 Polyclonal Antibody
Catalog # AP69404

Specification

CYP2J2 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IF**
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; CYPIIJ2

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.
IHC-P~~N/A
IF~~1:50~200

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

Storage Conditions
-20℃

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: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 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 Cytomety
- Cell Culture

CYP2J2 Polyclonal Antibody - Images

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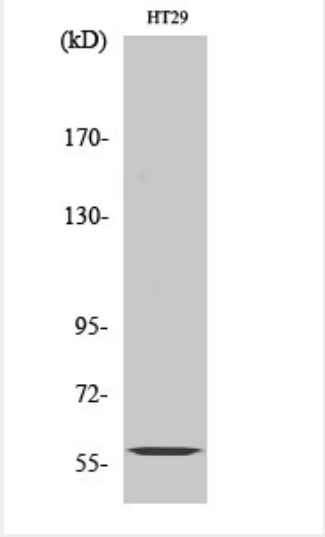

Western Blot analysis of various cells using CYP2J2 Polyclonal Antibody

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).