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Cytochrome P450 2U1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51148

Product Information

Application	WB, ICC, IHC-P
Primary Accession	Q7Z449
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61987

Additional Information

Gene ID	113612
Other Names	Cytochrome P450 2U1, CYP2U1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 2U1. The exact sequence is proprietary.
Dilution	WB~~1:1000 ICC~~N/A IHC-P~~N/A
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

Protein Information

Name	CYP2U1 {ECO:0000303|PubMed:14660610, ECO:0000312|HGNC:HGNC:20582}
Function	A cytochrome P450 monooxygenase involved in the metabolism of arachidonic acid and its conjugates (PubMed:14660610, PubMed:24563460). 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:14660610, PubMed:24563460). Acts as an omega and omega-1 hydroxylase for arachidonic acid and possibly for other long chain fatty acids. May modulate the arachidonic acid signaling pathway and play a role in other fatty acid signaling processes (PubMed:14660610, PubMed:24563460). May down-regulate the biological activities of N-arachidonoyl-serotonin, an endocannabinoid that has anti-nociceptive effects through inhibition of fatty acid amide hydrolase FAAH, TRPV1 receptor and T-type calcium channels. Catalyzes C-2 oxidation of the indole ring of N-arachidonoyl-serotonin forming a less active product 2-oxo-N-arachidonoyl-serotonin (PubMed:24563460).

Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Microsome membrane; Multi- pass membrane protein. Mitochondrion inner membrane; Multi-pass membrane protein
Tissue Location	Widely expressed with stronger expression in thymus, heart and cerebellum.

Background

Catalyzes the hydroxylation of arachidonic acid, docosahexaenoic acid and other long chain fatty acids. May modulate the arachidonic acid signaling pathway and play a role in other fatty acid signaling processes.

References

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Karlgren M.,et al.Biochem. Biophys. Res. Commun. 315:679-685(2004).
Choudhary D.,et al.Arch. Biochem. Biophys. 436:50-61(2005).
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