

Cytochrome P450 2B6 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51146

Product Information

Application	WB, ICC, IHC-P
Primary Accession	P20813
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56278

Additional Information

Gene ID	1555
Other Names	Cytochrome P450 2B6, 11413-, 4-cineole 2-exo-monooxygenase, CYP2B6, Cytochrome P450 IIB1, CYP2B6
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	CYP2B6 {ECO:0000303 PubMed:21289075, ECO:0000312 HGNC:HGNC:2615}
Function	<p>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).</p>
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Tissue Location

Expressed in liver, lung and heart right ventricle.

Background

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Acts as a 1,4-cineole 2-exo-monooxygenase.

References

Yamano S.,et al.Biochemistry 28:7340-7348(1989).

Zhuge J.,et al.Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.

Grimwood J.,et al.Nature 428:529-535(2004).

Miles J.S.,et al.Nucleic Acids Res. 17:8241-8255(1989).

Thum T.,et al.Lancet 355:979-983(2000).

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