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CYP2B6 Polyclonal Antibody

Catalog # AP69392

Product Information

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

Additional Information

Gene ID	1555
Other Names	CYP2B6; Cytochrome P450 2B6; 1; 4-cineole 2-exo-monooxygenase; CYPIIB6; Cytochrome P450 IIB1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. 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℃

Protein Information

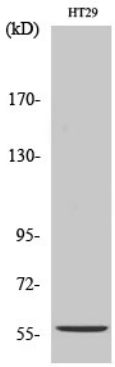
Name	CYP2B6 {ECO:0000303|PubMed:21289075, ECO:0000312|HGNC:HGNC:2615}
Function	A cytochrome P450 monooxygenase involved in the metabolism of endocannabinoids and steroids (PubMed:12865317, PubMed:21289075). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing 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 arachidonoylethanolamide (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).

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.

Images



Western Blot analysis of various cells using CYP2B6 Polyclonal Antibody