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Cytochrome P450 2B6 Rabbit pAb

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Catalog # AP52157

Product Information

Application	WB
Primary Accession	P20813
Reactivity	Rat, Human, Mouse
Predicted	Dog, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56278
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Cytochrome P450 2B6
Epitope Specificity	401-491/491
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	1555
Other Names	Cytochrome P450 2B6, 1.14.13.-, 1, 4-cineole 2-exo-monooxygenase, CYPIIB6, Cytochrome P450 IIB1, CYP2B6 {ECO:0000303|PubMed:21289075, ECO:0000312|HGNC:HGNC:2615}
Dilution	WB=1:500-2000,Flow-Cyt=2ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

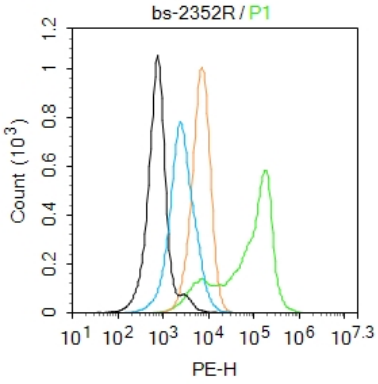
Background

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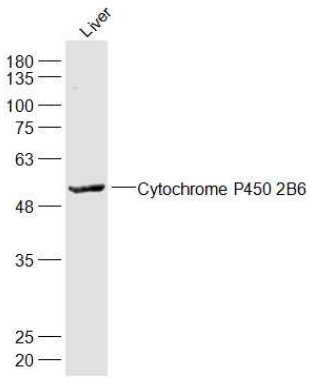
References

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).

Images



Blank control:U937.
Primary Antibody (green line): Rabbit Anti-Cytochrome P450 2B6 antibody (AP52157)
Dilution: 2 µg /10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody : Goat anti-rabbit IgG-PE
Dilution: 1 µg /test.
Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Sample:
Liver (Mouse) Lysate at 40 ug
Primary: Anti-Cytochrome P450 2B6 (AP52157) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 56 kD
Observed band size: 56 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.