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Cytochrome P450 2D6 Antibody

Rabbit mAb
Catalog # AP91528

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P10635
Reactivity	Human
Clonality	Monoclonal
Other Names	CPD6; CYP2D; CYP2D6; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; CYP2DL1; CYPIID6; P450 DB1; P450C2D; P450DB1; Xenobiotic monooxygenase;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	55769

Additional Information

Dilution	WB 1:500~1:1000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Cytochrome P450 2D6
Description	Cytochrome P450 2D6 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

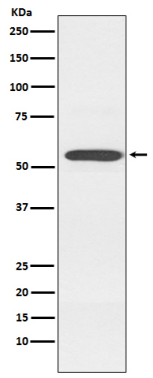
Name	CYP2D6 {ECO:0000303|PubMed:21289075, ECO:0000312|HGNC:HGNC:2625}
Function	A cytochrome P450 monooxygenase involved in the metabolism of fatty acids, steroids and retinoids (PubMed:18698000, PubMed:19965576, PubMed:20972997, PubMed:21289075, PubMed:21576599). Mechanistically, uses molecular oxygen 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:18698000, PubMed:19965576, PubMed:20972997, PubMed:21289075, PubMed:21576599). Catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) (PubMed:19965576, PubMed:20972997). Metabolizes endocannabinoid arachidonoylethanolamide (anandamide) to 20-hydroxyeicosatetraenoic acid ethanolamide (20-HETE-EA) and 8,9-, 11,12-, and 14,15-epoxyeicosatrienoic acid ethanolamides

(EpETrE-EAs), potentially modulating endocannabinoid system signaling (PubMed:18698000, PubMed:21289075). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes cholesterol toward 25-hydroxycholesterol, a physiological regulator of cellular cholesterol homeostasis (PubMed:21576599). Catalyzes the oxidative transformations of all-trans retinol to all-trans retinal, a precursor for the active form all-trans-retinoic acid (PubMed:10681376). Also involved in the oxidative metabolism of drugs such as antiarrhythmics, adrenoceptor antagonists, and tricyclic antidepressants.

Cellular Location

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Images



Western blot analysis of Cytochrome P450 2D6 expression in K562 cell lysate.

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