

CYP2D6 Polyclonal Antibody

Catalog # AP69400

Product Information

Application WB
Primary Accession P10635
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 55769

Additional Information

Gene ID 1565

Other Names CYP2D6; CYP2DL1; Cytochrome P450 2D6; CYPIID6; Cytochrome P450-DB1;

Debrisoquine 4-hydroxylase

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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: <u>21289075</u>, PubMed: <u>21576599</u>). Catalyzes the epoxidation of double

bonds of polyunsaturated fatty acids (PUFA) (PubMed: 19965576,

PubMed: <u>20972997</u>). 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.

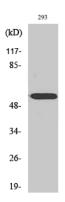
Cellular Location

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

Background

Responsible for the metabolism of many drugs and environmental chemicals that it oxidizes. It is involved in the metabolism of drugs such as antiarrhythmics, adrenoceptor antagonists, and tricyclic antidepressants.

Images



Western Blot analysis of various cells using CYP2D6 Polyclonal Antibody

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