

CYP2D6 Polyclonal Antibody

Catalog # AP69399

Product Information

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|-------------------|------------------------|
| Application | WB, IHC-P |
| Primary Accession | P10635 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 55769 |

Additional Information

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| 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. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P--N/A |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

Protein Information

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| 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 arachidonylethanolamide (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.

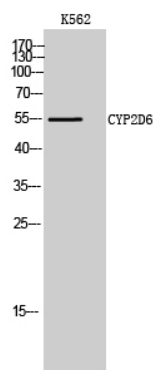
Cellular Location

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 K562 cells using CYP2D6 Polyclonal Antibody

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