

Cytochrome P450 2D6 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51914

Specification

Cytochrome P450 2D6 Antibody - Product Information

Application	WB, E
Primary Accession	P10635
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55 KDa

Cytochrome P450 2D6 Antibody - Additional Information

Gene ID 1565

Other Names

Cytochrome P450 2D6, CYP11D6, Cytochrome P450-DB1, Debrisoquine 4-hydroxylase, CYP2D6, CYP2DL1

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Cytochrome P450 2D6 Antibody - 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](http://www.uniprot.org/citations/18698000), PubMed: [19965576](http://www.uniprot.org/citations/19965576), PubMed: [20972997](http://www.uniprot.org/citations/20972997), PubMed: [21289075](http://www.uniprot.org/citations/21289075), PubMed: [21576599](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/18698000), PubMed: [19965576](http://www.uniprot.org/citations/19965576), PubMed: [20972997](http://www.uniprot.org/citations/20972997), PubMed: [21289075](http://www.uniprot.org/citations/21289075), PubMed: [21576599](http://www.uniprot.org/citations/21576599)). Catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) (PubMed: [19965576](http://www.uniprot.org/citations/19965576), PubMed: [18698000](http://www.uniprot.org/citations/18698000), PubMed: [19965576](http://www.uniprot.org/citations/19965576), PubMed: [20972997](http://www.uniprot.org/citations/20972997), PubMed: [21289075](http://www.uniprot.org/citations/21289075), PubMed: [21576599](http://www.uniprot.org/citations/21576599)).

<http://www.uniprot.org/citations/20972997> target="_blank">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

Cytochrome P450 2D6 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Cytochrome P450 2D6 Antibody - Images

Cytochrome P450 2D6 Antibody - 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.

Cytochrome P450 2D6 Antibody - References

- Gonzalez F.J.,et al.Genomics 2:174-179(1988).
Gonzalez F.J.,et al.Nature 331:442-446(1988).
Kimura S.,et al.Am. J. Hum. Genet. 45:889-904(1989).
Gaedigk A.,et al.Pharmacogenomics J. 5:173-182(2005).
Gaedigk A.,et al.Pharmacogenomics J. 5:276-276(2005).