

Anti-Cytochrome P450 2D6 Antibody
Catalog # ABO10720**Specification**

Anti-Cytochrome P450 2D6 Antibody - Product Information

Application	WB
Primary Accession	P10635
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Cytochrome P450 2D6(CYP2D6) detection. Tested with WB, IHC-P in Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Cytochrome P450 2D6 Antibody - Additional Information

Gene ID 1565

Other Names

Cytochrome P450 2D6, 1.14.14.1, CYP1D6, Cholesterol 25-hydroxylase, Cytochrome P450-DB1, Debrisoquine 4-hydroxylase, CYP2D6, CYP2DL1

Calculated MW

55769 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Rat, Mouse

Subcellular Localization

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

Protein Name

Cytochrome P450 2D6

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg Na₃N.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of mouse Cytochrome P450 2D6(194-214aa FACRFEYNDPRFIRLLDLLKD), identical to the related rat sequence.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the cytochrome P450 family.

Anti-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, 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

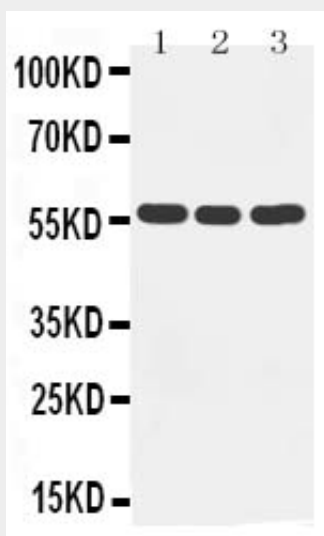
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Anti-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](#)

Anti-Cytochrome P450 2D6 Antibody - Images



Anti-Cytochrome P450 2D6 antibody, ABO10720, Western blotting
Lane 1: Rat Liver Tissue Lysate
Lane 2: Rat Kidney Tissue Lysate
Lane 3: Rat Brain Tissue Lysate

Anti-Cytochrome P450 2D6 Antibody - Background

Cytochrome P450 2D6 (CYP2D6) is one of the most important enzymes involved in the metabolism of xenobiotics in the body. It is a member of Cytochrome P450, family 2, subfamily D, polypeptide 6. Its gene is mapped to chromosome 22q13.1. It has got 497 amino acid proteins which shares 73% sequence identity with the rat protein. CYP2D6 is highly expressed in human liver. CYP2D6 is the major isozyme involved in the formation of N-hydroxyprocainamide, a metabolite potentially involved in the drug-induced lupus syndrome observed with procainamide