

CYP2D6 Polyclonal Antibody

Catalog No: YT1214

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: CYP2D6

Fields: >>Metabolism of xenobiotics by cytochrome P450;>>Drug metabolism -

cytochrome P450;>>Endocrine resistance;>>Serotonergic synapse

Gene Name: CYP2D6

Protein Name: Cytochrome P450 2D6

P10635

Human Gene Id: 1565

Human Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

Cytochrome P450 2D6. AA range:251-300

Specificity: CYP2D6 Polyclonal Antibody detects endogenous levels of CYP2D6 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 55kD



Cell Pathway : Drug metabolism;

Background : This gene encodes 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. This protein localizes to the endoplasmic reticulum and is known to metabolize as many as 25% of commonly prescribed drugs. Its substrates include antidepressants, antipsychotics, analgesics and antitussives, beta adrenergic blocking agents, antiarrythmics and antiemetics. The gene is highly polymorphic in the human population; certain alleles result in the poor metabolizer phenotype, characterized by a decreased ability to metabolize the enzyme's substrates. Some individuals with the poor metabolizer phenotype have no functional protein since they carry 2 null alleles whereas in other individuals the gene is absent. This gene can vary in

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Function : catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized

flavoprotein + H(2)O.,cofactor:Heme group.,function: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.,induction:By pregnancy.,online

information:CYP2D6 alleles,online information:CYP2D6

entry,polymorphism:Allele CYP2D6*7 was also known as CYP2D6E, allele CYP2D6*9 as CYP2D6C, allele CYP2D6*10 as CYP2D6J, allele CYP2D6*17 as CYP2D6Z.,polymorphism:Genetic variations in CYP2D6 are the cause of poor drug metabolism CYP2D6-related [MIM:608902]. The CYP2D6 gene is highly polymorphic. CYP2D6 activity ranges widely within a population comprising ultrarapid (UM), extensive (EM), intermediate (IM) and poor (PM) metabolizer

phenotypes. UM and PM are those most at risk f

Subcellular Location:

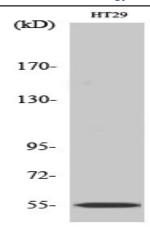
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome

membrane; Peripheral membrane protein.

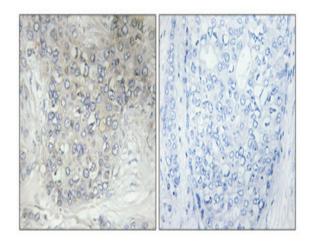
Expression : Brain, Liver, PCR rescued clones,

Products Images

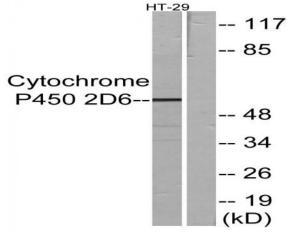
2/3



Western Blot analysis of various cells using CYP2D6 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



Western blot analysis of lysates from HT-29 cells, using Cytochrome P450 2D6 Antibody. The lane on the right is blocked with the synthesized peptide.