

CYP2A6/7/13 Polyclonal Antibody

Catalog No :	YT5093
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA
Target :	CYP2A6/7/13
Fields :	>>Caffeine metabolism;>>Retinol metabolism;>>Metabolism of xenobiotics by cytochrome P450;>>Drug metabolism - cytochrome P450;>>Drug metabolism - other enzymes;>>Metabolic pathways;>>Chemical carcinogenesis - DNA adducts;>>Lipid and atherosclerosis
Gene Name :	CYP2A6/CYP2A7/CYP2A13
Protein Name :	Cytochrome P450 2A6/Cytochrome P450 2A7/Cytochrome P450 2A13
Human Gene Id :	1553
Human Swiss Prot No :	P11509/P20853/Q16696
Immunogen :	Synthesized peptide derived from the Internal region of human CYP2A6/7/13.
Specificity :	CYP2A6/7/13 Polyclonal Antibody detects endogenous levels of CYP2A6/7/13 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. ELISA: 1:40000. Not yet tested in other applications.
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 : 56kD

Cell Pathway : Caffeine metabolism;Retinol metabolism;Drug metabolism;Drug metabolism;

Background : This gene, CYP2A6, 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 its expression is induced by phenobarbital. The enzyme is known to hydroxylate coumarin, and also metabolizes nicotine, aflatoxin B1, nitrosamines, and some pharmaceuticals. Individuals with certain allelic variants are said to have a poor metabolizer phenotype, meaning they do not efficiently metabolize coumarin or nicotine. This gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. The gene was formerly referred to as CYP2A3; however, it has been renamed CYP2A6. [provided by RefSeq, Jul 2008],

Function : catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized flavoprotein + H(2)O.,cofactor:Heme group.,function:Exhibits a high coumarin 7-hydroxylase activity. Can act in the hydroxylation of the anti-cancer drugs cyclophosphamide and ifosphamide. Competent in the metabolic activation of aflatoxin B1. Constitutes the major nicotine C-oxidase.,induction:By phenobarbital and dexamethasone.,online information:CYP2A6 alleles,online information:CYP2A6 entry,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Liver.,

Subcellular Location : Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein.

Expression : Liver.

Products Images

