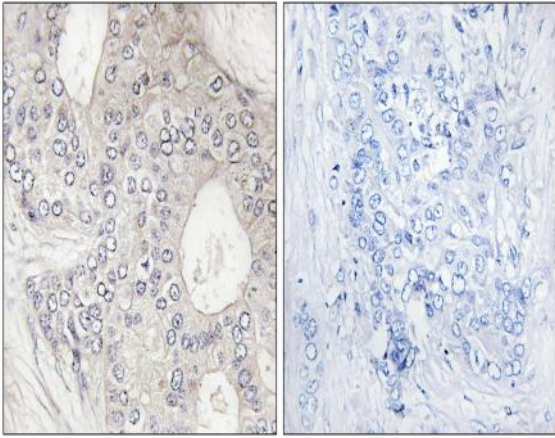


## CYP1A2 Polyclonal Antibody

<b>Catalog No :</b>	YT1192
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	IHC;IF;ELISA
<b>Target :</b>	CYP1A2
<b>Fields :</b>	>>Steroid hormone biosynthesis;>>Caffeine metabolism;>>Tryptophan metabolism;>>Linoleic acid metabolism;>>Retinol metabolism;>>Metabolism of xenobiotics by cytochrome P450;>>Drug metabolism - cytochrome P450;>>Metabolic pathways;>>Chemical carcinogenesis - DNA adducts;>>Chemical carcinogenesis - receptor activation;>>Chemical carcinogenesis - reactive oxygen species
<b>Gene Name :</b>	CYP1A2
<b>Protein Name :</b>	Cytochrome P450 1A2
<b>Human Gene Id :</b>	1544
<b>Human Swiss Prot No :</b>	P05177
<b>Mouse Gene Id :</b>	13077
<b>Mouse Swiss Prot No :</b>	P00186
<b>Rat Gene Id :</b>	24297
<b>Rat Swiss Prot No :</b>	P04799
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 1A2. AA range:331-380
<b>Specificity :</b>	CYP1A2 Polyclonal Antibody detects endogenous levels of CYP1A2 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	58kD
<b>Cell Pathway :</b>	Caffeine metabolism;Tryptophan metabolism;Linoleic acid metabolism;Retinol metabolism;Metabolism of xenobiotics by cytochrome P450;Drug metabolism;
<b>Background :</b>	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. The protein encoded by this gene localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. Other xenobiotic substrates for this enzyme include caffeine, aflatoxin B1, and acetaminophen. The transcript from this gene contains four Alu sequences flanked by direct repeats in the 3' untranslated region. [provided by RefSeq, Jul 2008],
<b>Function :</b>	catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized flavoprotein + H(2)O.,cofactor:Heme group.,function:Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Most active in catalyzing 2-hydroxylation. Caffeine is metabolized primarily by cytochrome CYP1A2 in the liver through an initial N3-demethylation. Also acts in the metabolism of aflatoxin B1 and acetaminophen. Participates in the bioactivation of carcinogenic aromatic and heterocyclic amines. Catalyzes the N-hydroxylation of heterocyclic amines and the O-deethylation of phenacetin.,induction:By nicotine, omeprazole, phenobarbital, primidone and rifampicin.,online information:CYP1A2 alleles,polymorphism:The
<b>Subcellular Location :</b>	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane ; Peripheral membrane protein.
<b>Expression :</b>	Liver.

## Products Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Cytochrome P450 1A2 Antibody. The picture on the right is blocked with the synthesized peptide.