

CYP1A1/2 Polyclonal Antibody

Catalog No :	YT1191
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	CYP1A1/2
Fields :	>>Steroid hormone biosynthesis;>>Tryptophan metabolism;>>Retinol metabolism;>>Metabolism of xenobiotics by cytochrome P450;>>Metabolic pathways;>>Ovarian steroidogenesis;>>Chemical carcinogenesis - DNA adducts;>>Chemical carcinogenesis - receptor activation;>>Chemical carcinogenesis - reactive oxygen species;>>Lipid and atherosclerosis
Gene Name :	CYP1A1/CYP1A2
Protein Name :	Cytochrome P450 1A1/2
Human Gene Id :	1543/1544
Human Swiss Prot No :	P04798/P05177
Mouse Gene Id :	13076/13077
Rat Gene Id :	24296/24297
Rat Swiss Prot No :	P00185/P04799
Immunogen :	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 1A1/2. AA range:71-120
Specificity :	CYP1A1/2 Polyclonal Antibody detects endogenous levels of CYP1A1/2 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. IF 1:200 - 1:1000. ELISA: 1:20000. 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 : 58kD

Cell Pathway : Steroid hormone biosynthesis;Tryptophan metabolism;Retinol metabolism;Metabolism of xenobiotics by cytochrome P450;

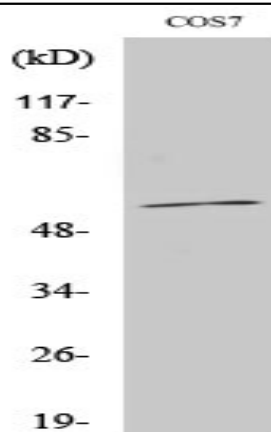
Background : This gene, CYP1A1, encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by 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. The gene has been associated with lung cancer risk. A related family member, CYP1A2, is located approximately 25 kb away from CYP1A1 on chromosome 15. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jan 2016],

Function : 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.,induction:By 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).,online information:CYP1A1 alleles,online information:CYP1A1 entry,online information:The Singapore human mutation and polymorphism database,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Lung, lymphocytes and placenta.,

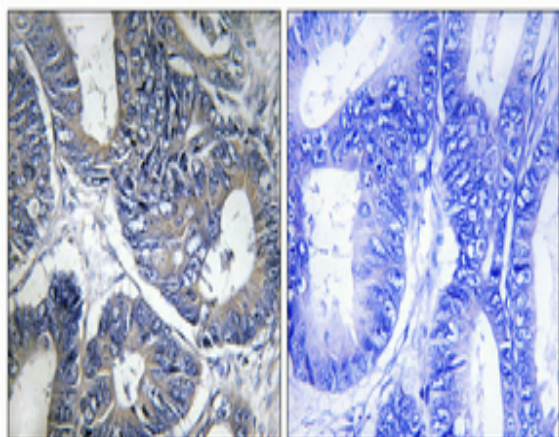
Subcellular Location : Endoplasmic reticulum membrane ; Peripheral membrane protein . Mitochondrion inner membrane ; Peripheral membrane protein . Microsome membrane ; Peripheral membrane protein . Cytoplasm .

Expression : Lung, lymphocytes and placenta.

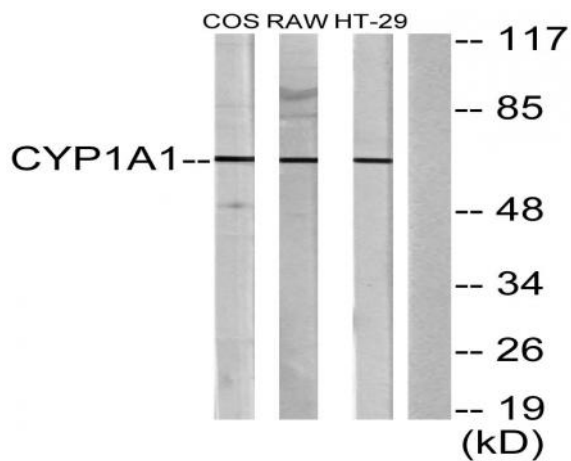
Products Images



Western Blot analysis of various cells using CYP1A1/2 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from COS7, RAW264.7, and HT-29 cells, using Cytochrome P450 1A1/2 Antibody. The lane on the right is blocked with the synthesized peptide.