



CYP1A1/2 Polyclonal Antibody

Catalog No	YP-Ab-02563
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	CYP1A1/CYP1A2
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CYP1A1/2;CYP1A1/CYP1A2;Cytochrome P450 1A1/2;CYP1A1;Cytochrome P450 1A1;CYPIA1;Cytochrome P450 form 6;Cytochrome P450-C;Cytochrome P450-P1;CYP1A2;Cytochrome P450 1A2;CYPIA2;Cytochrome P(3)450;Cytochrome P450 4;Cytochrome P450-P3
Observed Band	58kD
Calculated Molecular Weight	58kD
Cell Pathway	Endoplasmic reticulum membrane ; Peripheral membrane protein . Mitochondrion inner membrane ; Peripheral membrane protein . Microsome membrane ; Peripheral membrane protein . Cytoplasm .
Tissue Specificity	Lung, lymphocytes and placenta.
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.,

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],

matters needing attention

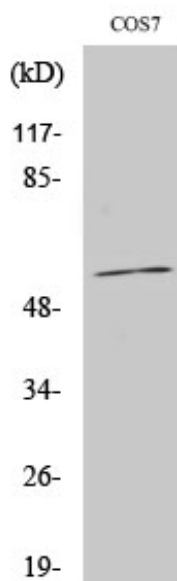
Avoid repeated freezing and thawing!

Usage suggestions

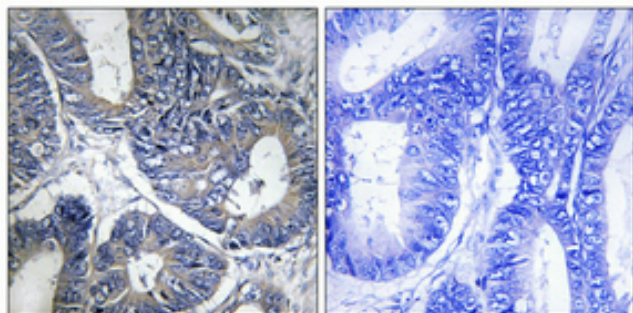
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



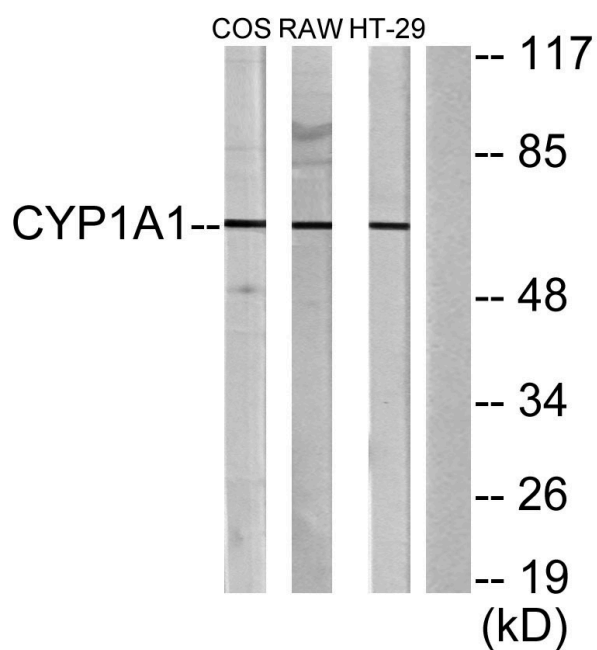
Products Images



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, pH 8.0 was used for antigen retrieval. Negative control (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.