



# CYP1A1/2 Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-02563
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Applications</b>	WB
<b>Gene Name</b>	CYP1A1/CYP1A2
<b>Protein Name</b>	Cytochrome P450 1A1/2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 1A1/2. AA range:71-120
<b>Specificity</b>	CYP1A1/2 Monoclonal Antibody detects endogenous levels of CYP1A1/2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	58kD
<b>Cell Pathway</b>	Endoplasmic reticulum membrane ; Peripheral membrane protein . Mitochondrion inner membrane ; Peripheral membrane protein . Microsome membrane ; Peripheral membrane protein . Cytoplasm .
<b>Tissue Specificity</b>	Lung, lymphocytes and placenta.
<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.,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],

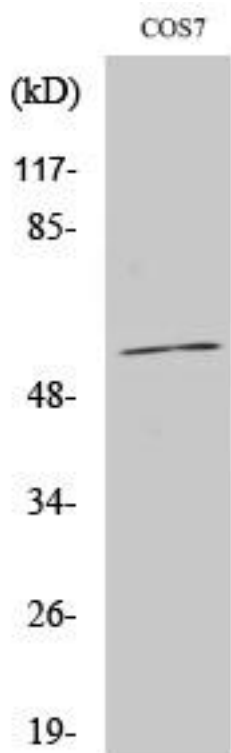
## matters needing attention

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 Monoclonal Antibody