



Rabbit Anti-P450 1A2 antibody

SL2589R

Product Name:	P450 1A2
Chinese Name:	细胞色素P450 1A2抗体
Alias:	CYP1A2; Cytochrome P450 1A2; cytochrome P450, family 1, subfamily a, polypeptide 2; Cytochrome P450 family 1 polypeptide 2; Cytochrome P450 subfamily I aromatic compound inducible polypeptide 2; Cyp1a2; CYPD45; P-450d; RATCYPD45; CYP1A2; CP12; CP 12; P3-450; Aryl hydrocarbon hydroxylase; Dioxin inducible P3 45; Flavoprotein linked monooxygenase; Microsomal monooxygenase; P450 4; P450 form 4; P450 P3; P450(PA); Xenobiotic monooxygenase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2ug/testIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human P450 1A2/CYP1A2:221-320/513
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 region. [provided by RefSeq].sequences flanked by direct repeats in the 3' untranslated.

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.

Subcellular Location:

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein.

Tissue Specificity:

Liver.

Similarity:

Belongs to the cytochrome P450 family.

SWISS:

P05177

Gene ID:

1544

Database links:

[Entrez Gene: 1544](#)Human

[Entrez Gene: 13077](#)Mouse

[Entrez Gene: 24297](#)Rat

[Omim: 124060](#)Human

[SwissProt: P05177](#)Human

[SwissProt: P00186](#)Mouse

[SwissProt: P04799](#)Rat

[Unigene: 1361](#)Human

[Unigene: 15537](#)Mouse

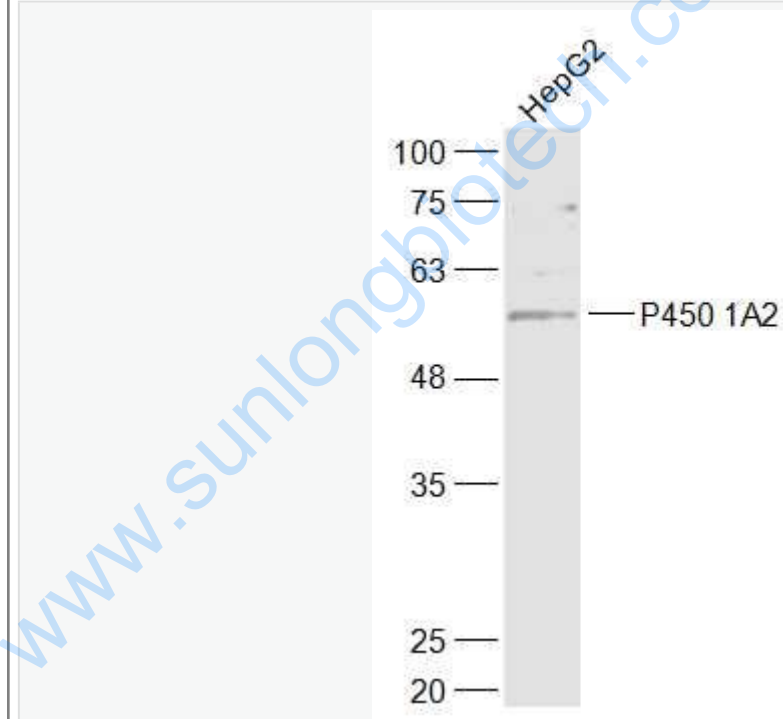
[Unigene: 5563](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Synthesis and Degradation (Synthesis and Degradation)

Picture:



Sample:

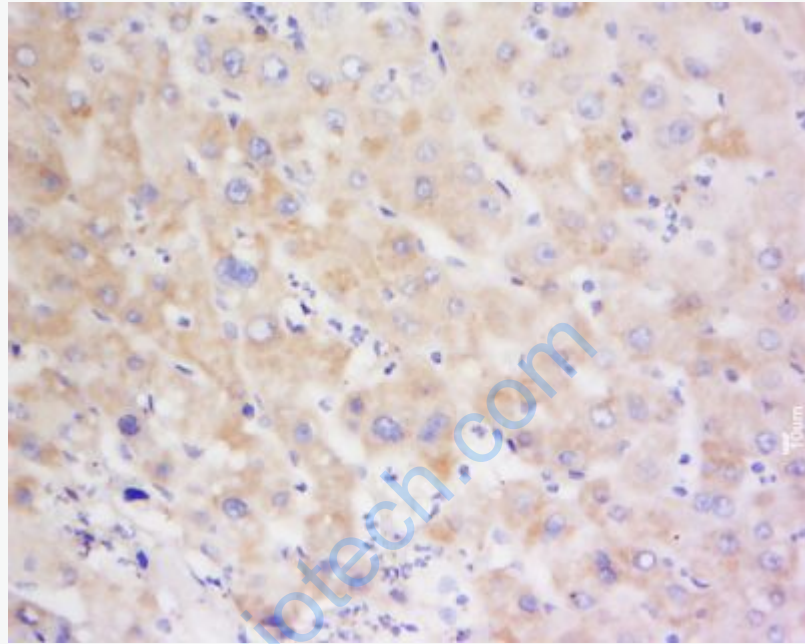
HepG2(Human) Cell Lysate at 30 ug

Primary: Anti-P450 1A2 (SL2589R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

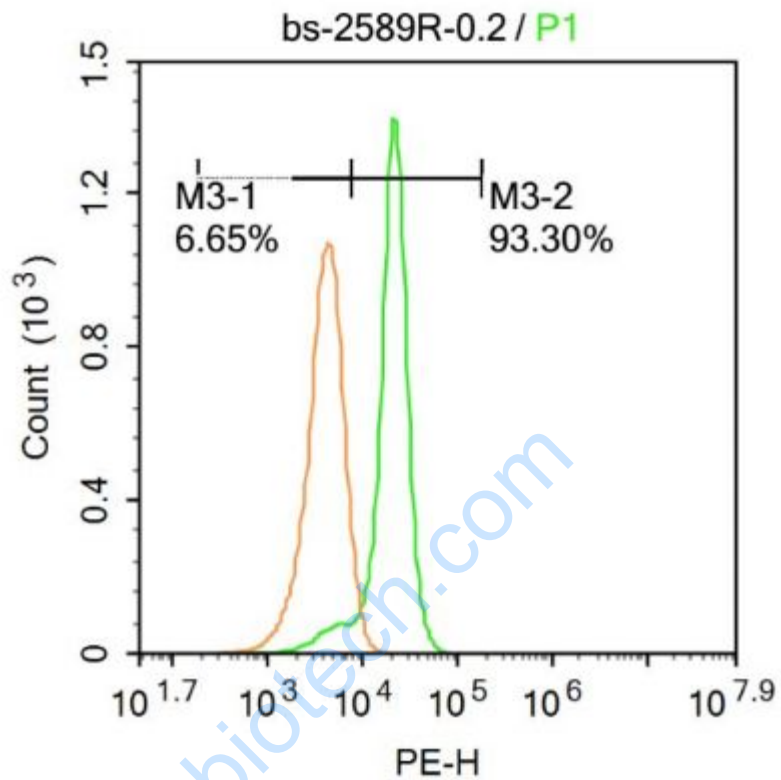
Observed band size: 56 kD



Tissue/cell: human liver cancer; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-P450 1A2 Polyclonal Antibody, Unconjugated(SL2589R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Molt-4.

Primary Antibody (green line): Rabbit Anti-P450 1A2 antibody (SL2589R)

Dilution: 0.2 μ g / 10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 0.2 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 20% PBST for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature.

	<p>The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.</p>
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