

Datasheet for ABIN3043820  
**anti-CYP1A2 antibody (AA 185-320)**

4 Images

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## Overview

Quantity:	100 µg
Target:	CYP1A2
Binding Specificity:	AA 185-320
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Cytochrome P450 1A2(CYP1A2) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	E.coli-derived human CYP1A2 recombinant protein (Position: H185-D320). Human CYP1A2 shares 69.9% and 72.1% amino acid (aa) sequence identity with mouse and rat CYP1A2, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Cytochrome P450 1A2(CYP1A2) detection. Tested with WB, IHC-P in Human,Mouse,Rat.</p> <p>Gene Name: cytochrome P450, family 1, subfamily A, polypeptide 2</p> <p>Protein Name: Cytochrome P450 1A2</p>
Purification:	Immunogen affinity purified.

## Target Details

Target:	CYP1A2
Alternative Name:	CYP1A2 ( <a href="#">CYP1A2 Products</a> )
Background:	<p>CYP1A2 (Cytochrome P450, Subfamily I, Polypeptide 2) is a member of the cytochrome P450 mixed-function oxidase system and is involved in the metabolism of xenobiotics in the body. CYP1A2 is a member of the cytochrome P450 superfamily of enzymes. In humans, the CYP1A2 enzyme is encoded by the CYP1A2 gene. CYP1A2 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 CYP1A2 gene encodes a P450 enzyme involved in O-deethylation of phenacetin. Ikeya et al. (1989) found that the human CYP1A2 gene spans almost 7.8 kb and contains 7 exons. The CYP1A2 gene is mapped on 15q24.1. CYP1A2 accounts for nearly 15 % of the cytochrome P450 in the human liver. CYP1A2 displays higher activity in men than in women, and is inhibited by oral contraceptives. Inducers of CYP1A2 include cruciferous vegetables. Cigarette smoking has also been shown to increase CYP1A2 activity. Expression of CYP1A2 appears to be induced by various dietary constituents.</p> <p>Synonyms: Aryl hydrocarbon hydroxylase antibody CP 12 antibody CP12 antibody CP1A2_HUMAN antibody  CYP1A2 antibody CYPIA2 antibody Cytochrome P(3)450 antibody Cytochrome P450 1A2 antibody  Cytochrome P450 4 antibody Cytochrome P450 family 1 polypeptide 2 antibody Cytochrome P450 family 1 subfamily A polypeptide 2 antibody Cytochrome P450 subfamily I aromatic compound inducible polypeptide 2 antibody Cytochrome P450-P3 antibody Cytochrome P4501A2 antibody  Dioxin inducible P3 450 antibody Flavoprotein linked monooxygenase antibody Microsomal monooxygenase antibody P(3)450 antibody P3 450 antibody P450 4 antibody P450 form 4 antibody P450 P3 antibody P450(PA) antibody Xenobiotic monooxygenase antibody</p>
Gene ID:	1544
UniProt:	<a href="#">P05177</a>

## Application Details

Application Notes:	<p>WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Mouse, Rat, Predicted Species: Human</p> <p>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</p> <p>Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested.</p>
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## Application Details

Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

## Publications

Product cited in: Mao, Lu, Wang, Tian, Huang, Feng, Zhang, Chang: "Role of PI3K p110β in the differentiation of human embryonic stem cells into islet-like cells." in: **Biochemical and biophysical research communications**, Vol. 488, Issue 1, pp. 109-115, (2017) ([PubMed](#)).

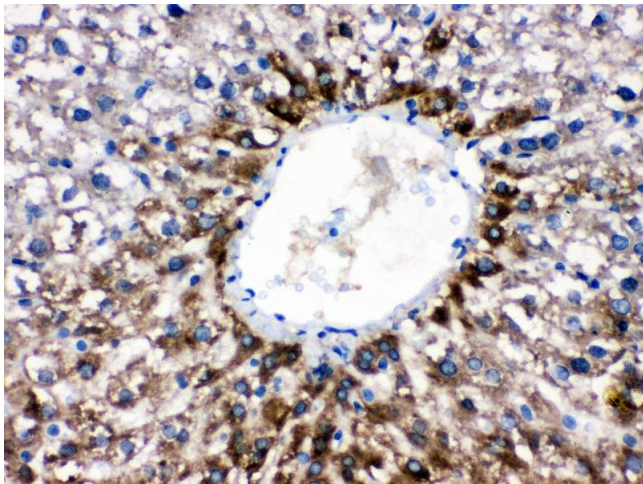
Wang, Zhou, Zhang, Wu, Zhang, Zhang: "Identification and localization of gastrointestinal hormones in the skin of the bullfrog *Rana catesbeiana* during periods of activity and hibernation." in: **Acta histochemica**, Vol. 116, Issue 8, pp. 1418-26, (2014) ([PubMed](#)).

Chen, He, Peng, Liu, Jin, Cao, Wang, Xiao: "An immunohistochemical study of somatostatin in the stomach and the small intestine of the African ostrich (*Struthio camelus*).\" in: **Tissue & cell**, Vol. 45, Issue 6, pp. 363-6, (2013) ([PubMed](#)).

Jiang, Deng, Duan, Chen, Xiang, Lu, Ma: "Somatostatin receptors SSTR2 and SSTR5 are expressed in the human thoracic duct." in: **Lymphology**, Vol. 44, Issue 1, pp. 21-8, (2011) ([PubMed](#)).

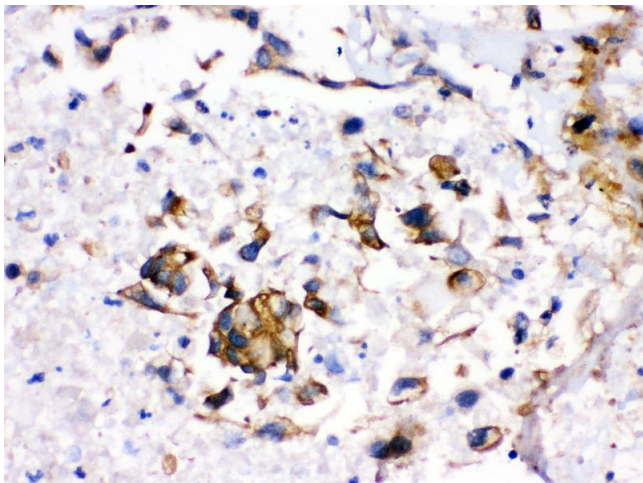
Zong, Chen, Zhang, Zou: "Effects of intra-gastric beta-casomorphin-7 on somatostatin and gastrin gene expression in rat gastric mucosa." in: **World journal of gastroenterology**, Vol. 13, Issue 14, pp. 2094-9, (2007) ([PubMed](#)).

Validation report #300031 for Immunohistochemistry (IHC)



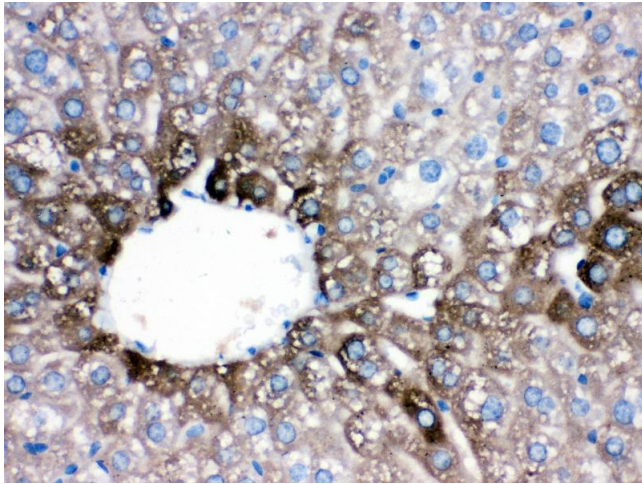
Immunohistochemistry

**Image 1.** Anti- CYP1A2 Picoband antibody, IHC(P) IHC(P):  
Rat Liver Tissue



Immunohistochemistry

**Image 2.** Anti- CYP1A2 Picoband antibody, IHC(P) IHC(P):  
Human Liver Cancer Tissue



#### Immunohistochemistry

**Image 3.** Anti- CYP1A2 Picoband antibody, IHC(P) IHC(P):  
Mouse Liver Tissue

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN3043820.