



# CYP3A4 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-02595
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CYP3A4
<b>Protein Name</b>	Cytochrome P450 3A4
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 3A4. AA range:91-140
<b>Specificity</b>	CYP3A4 Polyclonal Antibody detects endogenous levels of CYP3A4 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CYP3A4; CYP3A3; Cytochrome P450 3A4; 1; 8-cineole 2-exo-monooxygenase; Albendazole monooxygenase; Albendazole sulfoxidase; CYP3A3; CYP3A4; Cytochrome P450 3A3; Cytochrome P450 HLp; Cytochrome P450 NF-25; Cytochrome P450-PCN1; Nifedipine
<b>Observed Band</b>	57kD
<b>Cell Pathway</b>	Endoplasmic reticulum membrane; Single-pass membrane protein. Microsome membrane ; Single-pass membrane protein.
<b>Tissue Specificity</b>	Expressed in prostate and liver. According to some authors, it is not expressed in brain (PubMed:19094056). According to others, weak levels of expression are measured in some brain locations (PubMed:19359404 and PubMed:18545703). Also expressed in epithelium of the small intestine and large intestine, bile duct, nasal mucosa, kidney, adrenal cortex, epithelium of the gastric mucosa with intestinal metaplasia, gallbladder, intercalated ducts of the pancreas, chief cells of the parathyroid and the corpus luteum of the ovary (at protein level).
<b>Function</b>	catalytic activity:Albendazole + NADPH + O(2) = albendazole S-oxide + NADP(+) + H(2)O.,catalytic activity:Lithocholate + NADPH + O(2) = hyodeoxycholate + NADP(+) + H(2)O.,catalytic activity:Quinine + NADPH + O(2) = 3-hydroxyquinine + NADP(+) + H(2)O.,catalytic activity:Taurochenodeoxycholate + NADPH + O(2) = taurohyocholate + NADP(+) + 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 performs a variety of oxidation reactions (e.g. caffeine 8-oxidation, omeprazole sulfoxidation, midazolam 1'-hydroxylation and midazolam 4-hydroxylation) of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. The enzyme also hydroxylates etoposide.,induction:By glucocorticoids. Also induced to high levels in liver and other tissue

**Background**

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that 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 glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam and erythromycin. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isoforms

**matters needing attention**

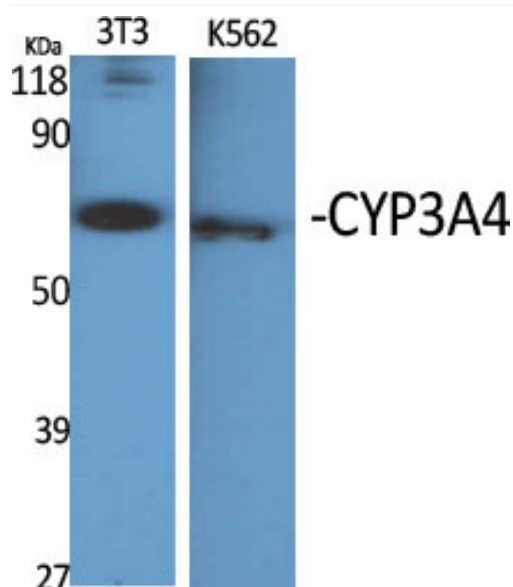
Avoid repeated freezing and thawing!

**Usage suggestions**

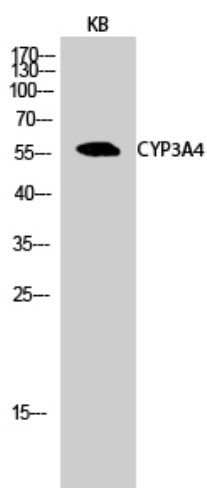
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



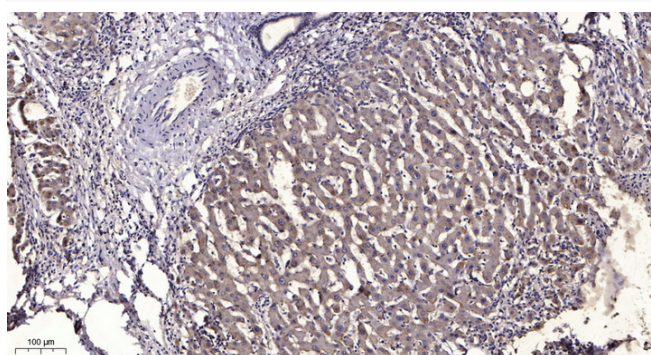
## Products Images



Western Blot analysis of various cells using CYP3A4 Polyclonal Antibody diluted at 1:1000



Western Blot analysis of KB cells using CYP3A4 Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).